

LEAN SIX SIGMA BLACK BELT STUDY GUIDE 2026-2027

- EXAM 25 (150 QUESTIONS)

Choose the best answer for each question. This original practice exam covers Black Belt leadership, advanced analytics, design of experiments, Lean improvement, and control. Complete all 150 questions before reviewing the answer key and explanations.

1. A Black Belt needs to prioritize improvement projects that support enterprise objectives and measurable value. Which approach is most appropriate?

- A. Project portfolio management
- B. Confidence interval estimation
- C. Strategic project selection
- D. Full factorial design

2. Which method directly helps a deployment team prioritize improvement projects that support enterprise objectives and measurable value?

- A. Project portfolio management
- B. Strategic project selection
- C. Confidence interval estimation
- D. Full factorial design

3. To prioritize improvement projects that support enterprise objectives and measurable value, the Black Belt should use which tool?

- A. Project portfolio management
- B. Strategic project selection
- C. Confidence interval estimation

D. Full factorial design

4. Which technique best supports an effort to prioritize improvement projects that support enterprise objectives and measurable value?

- A. Strategic project selection
- B. Project portfolio management
- C. Confidence interval estimation
- D. Full factorial design

5. A project requires the team to prioritize improvement projects that support enterprise objectives and measurable value. What should it apply?

- A. Project portfolio management
- B. Confidence interval estimation
- C. Full factorial design
- D. Strategic project selection

6. A Black Belt needs to balance project resources, timing, risk, and expected benefits across initiatives. Which approach is most appropriate?

- A. Business case analysis
- B. Hypothesis testing
- C. Project portfolio management
- D. Randomization

7. Which method directly helps a deployment team balance project resources, timing, risk, and expected benefits across initiatives?

- A. Project portfolio management
- B. Business case analysis

- C. Hypothesis testing
- D. Randomization

8. To balance project resources, timing, risk, and expected benefits across initiatives, the Black Belt should use which tool?

- A. Business case analysis
- B. Hypothesis testing
- C. Randomization
- D. Project portfolio management

9. Which technique best supports an effort to balance project resources, timing, risk, and expected benefits across initiatives?

- A. Business case analysis
- B. Hypothesis testing
- C. Project portfolio management
- D. Randomization

10. A project requires the team to balance project resources, timing, risk, and expected benefits across initiatives. What should it apply?

- A. Business case analysis
- B. Project portfolio management
- C. Hypothesis testing
- D. Randomization

11. A Black Belt needs to link a proposed improvement to a quantified organizational need. Which approach is most appropriate?

- A. Voice of customer deployment

- B. Power analysis
- C. Blocking
- D. Business case analysis

12. Which method directly helps a deployment team link a proposed improvement to a quantified organizational need?

- A. Voice of customer deployment
- B. Power analysis
- C. Business case analysis
- D. Blocking

13. To link a proposed improvement to a quantified organizational need, the Black Belt should use which tool?

- A. Voice of customer deployment
- B. Business case analysis
- C. Power analysis
- D. Blocking

14. Which technique best supports an effort to link a proposed improvement to a quantified organizational need?

- A. Business case analysis
- B. Voice of customer deployment
- C. Power analysis
- D. Blocking

15. A project requires the team to link a proposed improvement to a quantified organizational need. What should it apply?

- A. Voice of customer deployment
- B. Business case analysis
- C. Power analysis
- D. Blocking

16. A Black Belt needs to translate customer needs into critical requirements across processes. Which approach is most appropriate?

- A. Critical-to-quality flowdown
- B. Regression modeling
- C. Voice of customer deployment
- D. Response surface methodology

17. Which method directly helps a deployment team translate customer needs into critical requirements across processes?

- A. Voice of customer deployment
- B. Critical-to-quality flowdown
- C. Regression modeling
- D. Response surface methodology

18. To translate customer needs into critical requirements across processes, the Black Belt should use which tool?

- A. Critical-to-quality flowdown
- B. Regression modeling
- C. Response surface methodology
- D. Voice of customer deployment

19. Which technique best supports an effort to translate customer needs into critical requirements across processes?

- A. Critical-to-quality flowdown
- B. Regression modeling
- C. Voice of customer deployment
- D. Response surface methodology

20. A project requires the team to translate customer needs into critical requirements across processes. What should it apply?

- A. Critical-to-quality flowdown
- B. Regression modeling
- C. Response surface methodology
- D. Voice of customer deployment

21. A Black Belt needs to decompose a customer requirement into measurable process characteristics. Which approach is most appropriate?

- A. Critical-to-quality flowdown
- B. Measurement system analysis
- C. Residual analysis
- D. Confirmation experiment

22. Which method directly helps a deployment team decompose a customer requirement into measurable process characteristics?

- A. Measurement system analysis
- B. Critical-to-quality flowdown
- C. Residual analysis
- D. Confirmation experiment

23. To decompose a customer requirement into measurable process characteristics, the Black Belt should use which tool?

- A. Measurement system analysis
- B. Critical-to-quality flowdown
- C. Residual analysis
- D. Confirmation experiment

24. Which technique best supports an effort to decompose a customer requirement into measurable process characteristics?

- A. Critical-to-quality flowdown
- B. Measurement system analysis
- C. Residual analysis
- D. Confirmation experiment

25. A project requires the team to decompose a customer requirement into measurable process characteristics. What should it apply?

- A. Measurement system analysis
- B. Residual analysis
- C. Confirmation experiment
- D. Critical-to-quality flowdown

26. A Black Belt needs to determine whether measurement variation is acceptable for the intended decision. Which approach is most appropriate?

- A. Gage R and R study
- B. Analysis of variance
- C. Measurement system analysis
- D. Process capability analysis

27. Which method directly helps a deployment team determine whether measurement variation is acceptable for the intended decision?

- A. Gage R and R study
- B. Analysis of variance
- C. Measurement system analysis
- D. Process capability analysis

28. To determine whether measurement variation is acceptable for the intended decision, the Black Belt should use which tool?

- A. Measurement system analysis
- B. Gage R and R study
- C. Analysis of variance
- D. Process capability analysis

29. Which technique best supports an effort to determine whether measurement variation is acceptable for the intended decision?

- A. Gage R and R study
- B. Analysis of variance
- C. Process capability analysis
- D. Measurement system analysis

30. A project requires the team to determine whether measurement variation is acceptable for the intended decision. What should it apply?

- A. Gage R and R study
- B. Measurement system analysis
- C. Analysis of variance
- D. Process capability analysis

31. A Black Belt needs to separate repeatability and reproducibility contributions to measurement variation. Which approach is most appropriate?

- A. Sampling plan design
- B. Gage R and R study
- C. Nonparametric testing
- D. Control chart selection

32. Which method directly helps a deployment team separate repeatability and reproducibility contributions to measurement variation?

- A. Sampling plan design
- B. Nonparametric testing
- C. Control chart selection
- D. Gage R and R study

33. To separate repeatability and reproducibility contributions to measurement variation, the Black Belt should use which tool?

- A. Gage R and R study
- B. Sampling plan design
- C. Nonparametric testing
- D. Control chart selection

34. Which technique best supports an effort to separate repeatability and reproducibility contributions to measurement variation?

- A. Sampling plan design
- B. Nonparametric testing
- C. Gage R and R study
- D. Control chart selection

35. A project requires the team to separate repeatability and reproducibility contributions to measurement variation. What should it apply?

- A. Sampling plan design
- B. Gage R and R study
- C. Nonparametric testing
- D. Control chart selection

36. A Black Belt needs to select observations that represent the population while controlling bias. Which approach is most appropriate?

- A. Sampling plan design
- B. Confidence interval estimation
- C. Chi-square analysis
- D. CUSUM chart

37. Which method directly helps a deployment team select observations that represent the population while controlling bias?

- A. Confidence interval estimation
- B. Chi-square analysis
- C. CUSUM chart
- D. Sampling plan design

38. To select observations that represent the population while controlling bias, the Black Belt should use which tool?

- A. Confidence interval estimation
- B. Chi-square analysis
- C. Sampling plan design
- D. CUSUM chart

39. Which technique best supports an effort to select observations that represent the population while controlling bias?

- A. Confidence interval estimation
- B. Chi-square analysis
- C. Sampling plan design
- D. CUSUM chart

40. A project requires the team to select observations that represent the population while controlling bias. What should it apply?

- A. Sampling plan design
- B. Confidence interval estimation
- C. Chi-square analysis
- D. CUSUM chart

41. A Black Belt needs to quantify uncertainty around an estimated population parameter. Which approach is most appropriate?

- A. Hypothesis testing
- B. Fractional factorial design
- C. Failure mode and effects analysis
- D. Confidence interval estimation

42. Which method directly helps a deployment team quantify uncertainty around an estimated population parameter?

- A. Hypothesis testing
- B. Confidence interval estimation
- C. Fractional factorial design
- D. Failure mode and effects analysis

43. To quantify uncertainty around an estimated population parameter, the Black Belt should use which tool?

- A. Hypothesis testing
- B. Fractional factorial design
- C. Confidence interval estimation
- D. Failure mode and effects analysis

44. Which technique best supports an effort to quantify uncertainty around an estimated population parameter?

- A. Hypothesis testing
- B. Fractional factorial design
- C. Failure mode and effects analysis
- D. Confidence interval estimation

45. A project requires the team to quantify uncertainty around an estimated population parameter. What should it apply?

- A. Hypothesis testing
- B. Confidence interval estimation
- C. Fractional factorial design
- D. Failure mode and effects analysis

46. A Black Belt needs to use sample evidence to evaluate a claim about process performance. Which approach is most appropriate?

- A. Hypothesis testing
- B. Power analysis
- C. Full factorial design
- D. Poka-yoke design

47. Which method directly helps a deployment team use sample evidence to evaluate a claim about process performance?

- A. Power analysis
- B. Full factorial design
- C. Hypothesis testing
- D. Poka-yoke design

48. To use sample evidence to evaluate a claim about process performance, the Black Belt should use which tool?

- A. Hypothesis testing
- B. Power analysis
- C. Full factorial design
- D. Poka-yoke design

49. Which technique best supports an effort to use sample evidence to evaluate a claim about process performance?

- A. Power analysis
- B. Full factorial design
- C. Poka-yoke design
- D. Hypothesis testing

50. A project requires the team to use sample evidence to evaluate a claim about process performance. What should it apply?

- A. Power analysis
- B. Hypothesis testing
- C. Full factorial design
- D. Poka-yoke design

51. A Black Belt needs to estimate the ability of a study to detect a meaningful effect. Which approach is most appropriate?

- A. Regression modeling
- B. Randomization
- C. Lean value stream analysis
- D. Power analysis

52. Which method directly helps a deployment team estimate the ability of a study to detect a meaningful effect?

- A. Regression modeling
- B. Power analysis
- C. Randomization
- D. Lean value stream analysis

53. To estimate the ability of a study to detect a meaningful effect, the Black Belt should use which tool?

- A. Regression modeling
- B. Randomization
- C. Power analysis
- D. Lean value stream analysis

54. Which technique best supports an effort to estimate the ability of a study to detect a meaningful effect?

- A. Power analysis
- B. Regression modeling
- C. Randomization
- D. Lean value stream analysis

55. A project requires the team to estimate the ability of a study to detect a meaningful effect. What should it apply?

- A. Regression modeling
- B. Randomization
- C. Power analysis
- D. Lean value stream analysis

56. A Black Belt needs to estimate how a response changes with one or more predictors. Which approach is most appropriate?

- A. Residual analysis
- B. Blocking
- C. Change management plan
- D. Regression modeling

57. Which method directly helps a deployment team estimate how a response changes with one or more predictors?

- A. Residual analysis
- B. Regression modeling
- C. Blocking
- D. Change management plan

58. To estimate how a response changes with one or more predictors, the Black Belt should use which tool?

- A. Regression modeling
- B. Residual analysis
- C. Blocking
- D. Change management plan

59. Which technique best supports an effort to estimate how a response changes with one or more predictors?

- A. Regression modeling
- B. Residual analysis
- C. Blocking
- D. Change management plan

60. A project requires the team to estimate how a response changes with one or more predictors. What should it apply?

- A. Residual analysis
- B. Regression modeling
- C. Blocking
- D. Change management plan

61. A Black Belt needs to check whether a fitted regression model satisfies key assumptions. Which approach is most appropriate?

- A. Analysis of variance
- B. Response surface methodology
- C. Control plan
- D. Residual analysis

62. Which method directly helps a deployment team check whether a fitted regression model satisfies key assumptions?

- A. Analysis of variance
- B. Response surface methodology
- C. Residual analysis
- D. Control plan

63. To check whether a fitted regression model satisfies key assumptions, the Black Belt should use which tool?

- A. Residual analysis
- B. Analysis of variance
- C. Response surface methodology
- D. Control plan

64. Which technique best supports an effort to check whether a fitted regression model satisfies key assumptions?

- A. Analysis of variance
- B. Residual analysis
- C. Response surface methodology
- D. Control plan

65. A project requires the team to check whether a fitted regression model satisfies key assumptions. What should it apply?

- A. Analysis of variance
- B. Response surface methodology
- C. Residual analysis
- D. Control plan

66. A Black Belt needs to compare mean responses across three or more groups. Which approach is most appropriate?

- A. Nonparametric testing
- B. Confirmation experiment
- C. Strategic project selection
- D. Analysis of variance

67. Which method directly helps a deployment team compare mean responses across three or more groups?

- A. Nonparametric testing
- B. Confirmation experiment
- C. Strategic project selection
- D. Analysis of variance

68. To compare mean responses across three or more groups, the Black Belt should use which tool?

- A. Nonparametric testing
- B. Confirmation experiment
- C. Analysis of variance
- D. Strategic project selection

69. Which technique best supports an effort to compare mean responses across three or more groups?

- A. Analysis of variance
- B. Nonparametric testing
- C. Confirmation experiment
- D. Strategic project selection

70. A project requires the team to compare mean responses across three or more groups. What should it apply?

- A. Nonparametric testing
- B. Analysis of variance
- C. Confirmation experiment
- D. Strategic project selection

71. A Black Belt needs to compare groups when distributional assumptions are not reasonable. Which approach is most appropriate?

- A. Nonparametric testing

- B. Chi-square analysis
- C. Process capability analysis
- D. Project portfolio management

72. Which method directly helps a deployment team compare groups when distributional assumptions are not reasonable?

- A. Chi-square analysis
- B. Process capability analysis
- C. Project portfolio management
- D. Nonparametric testing

73. To compare groups when distributional assumptions are not reasonable, the Black Belt should use which tool?

- A. Chi-square analysis
- B. Process capability analysis
- C. Nonparametric testing
- D. Project portfolio management

74. Which technique best supports an effort to compare groups when distributional assumptions are not reasonable?

- A. Chi-square analysis
- B. Nonparametric testing
- C. Process capability analysis
- D. Project portfolio management

75. A project requires the team to compare groups when distributional assumptions are not reasonable. What should it apply?

- A. Nonparametric testing
- B. Chi-square analysis
- C. Process capability analysis
- D. Project portfolio management

76. A Black Belt needs to evaluate association or fit for categorical data. Which approach is most appropriate?

- A. Fractional factorial design
- B. Chi-square analysis
- C. Control chart selection
- D. Business case analysis

77. Which method directly helps a deployment team evaluate association or fit for categorical data?

- A. Fractional factorial design
- B. Control chart selection
- C. Business case analysis
- D. Chi-square analysis

78. To evaluate association or fit for categorical data, the Black Belt should use which tool?

- A. Fractional factorial design
- B. Control chart selection
- C. Chi-square analysis
- D. Business case analysis

79. Which technique best supports an effort to evaluate association or fit for categorical data?

- A. Fractional factorial design
- B. Chi-square analysis

- C. Control chart selection
- D. Business case analysis

80. A project requires the team to evaluate association or fit for categorical data. What should it apply?

- A. Chi-square analysis
- B. Fractional factorial design
- C. Control chart selection
- D. Business case analysis

81. A Black Belt needs to screen many factors efficiently using a reduced experiment. Which approach is most appropriate?

- A. Full factorial design
- B. CUSUM chart
- C. Voice of customer deployment
- D. Fractional factorial design

82. Which method directly helps a deployment team screen many factors efficiently using a reduced experiment?

- A. Full factorial design
- B. CUSUM chart
- C. Fractional factorial design
- D. Voice of customer deployment

83. To screen many factors efficiently using a reduced experiment, the Black Belt should use which tool?

- A. Full factorial design
- B. CUSUM chart

- C. Voice of customer deployment
- D. Fractional factorial design

84. Which technique best supports an effort to screen many factors efficiently using a reduced experiment?

- A. Full factorial design
- B. CUSUM chart
- C. Fractional factorial design
- D. Voice of customer deployment

85. A project requires the team to screen many factors efficiently using a reduced experiment. What should it apply?

- A. Fractional factorial design
- B. Full factorial design
- C. CUSUM chart
- D. Voice of customer deployment

86. A Black Belt needs to estimate main effects and interactions through all factor combinations. Which approach is most appropriate?

- A. Randomization
- B. Full factorial design
- C. Failure mode and effects analysis
- D. Critical-to-quality flowdown

87. Which method directly helps a deployment team estimate main effects and interactions through all factor combinations?

- A. Randomization

- B. Full factorial design
- C. Failure mode and effects analysis
- D. Critical-to-quality flowdown

88. To estimate main effects and interactions through all factor combinations, the Black Belt should use which tool?

- A. Randomization
- B. Failure mode and effects analysis
- C. Critical-to-quality flowdown
- D. Full factorial design

89. Which technique best supports an effort to estimate main effects and interactions through all factor combinations?

- A. Randomization
- B. Failure mode and effects analysis
- C. Full factorial design
- D. Critical-to-quality flowdown

90. A project requires the team to estimate main effects and interactions through all factor combinations. What should it apply?

- A. Full factorial design
- B. Randomization
- C. Failure mode and effects analysis
- D. Critical-to-quality flowdown

91. A Black Belt needs to protect an experiment from time-related or nuisance bias. Which approach is most appropriate?

- A. Blocking
- B. Poka-yoke design
- C. Measurement system analysis
- D. Randomization

92. Which method directly helps a deployment team protect an experiment from time-related or nuisance bias?

- A. Blocking
- B. Randomization
- C. Poka-yoke design
- D. Measurement system analysis

93. To protect an experiment from time-related or nuisance bias, the Black Belt should use which tool?

- A. Randomization
- B. Blocking
- C. Poka-yoke design
- D. Measurement system analysis

94. Which technique best supports an effort to protect an experiment from time-related or nuisance bias?

- A. Blocking
- B. Poka-yoke design
- C. Randomization
- D. Measurement system analysis

95. A project requires the team to protect an experiment from time-related or nuisance bias. What should it apply?

- A. Blocking

- B. Poka-yoke design
- C. Measurement system analysis
- D. Randomization

96. A Black Belt needs to reduce experimental noise from a known nuisance source. Which approach is most appropriate?

- A. Blocking
- B. Response surface methodology
- C. Lean value stream analysis
- D. Gage R and R study

97. Which method directly helps a deployment team reduce experimental noise from a known nuisance source?

- A. Response surface methodology
- B. Lean value stream analysis
- C. Blocking
- D. Gage R and R study

98. To reduce experimental noise from a known nuisance source, the Black Belt should use which tool?

- A. Response surface methodology
- B. Blocking
- C. Lean value stream analysis
- D. Gage R and R study

99. Which technique best supports an effort to reduce experimental noise from a known nuisance source?

- A. Response surface methodology

- B. Lean value stream analysis
- C. Blocking
- D. Gage R and R study

100. A project requires the team to reduce experimental noise from a known nuisance source. What should it apply?

- A. Blocking
- B. Response surface methodology
- C. Lean value stream analysis
- D. Gage R and R study

101. A Black Belt needs to optimize settings after important factors have been identified. Which approach is most appropriate?

- A. Confirmation experiment
- B. Response surface methodology
- C. Change management plan
- D. Sampling plan design

102. Which method directly helps a deployment team optimize settings after important factors have been identified?

- A. Confirmation experiment
- B. Change management plan
- C. Sampling plan design
- D. Response surface methodology

103. To optimize settings after important factors have been identified, the Black Belt should use which tool?

- A. Confirmation experiment
- B. Change management plan
- C. Response surface methodology
- D. Sampling plan design

104. Which technique best supports an effort to optimize settings after important factors have been identified?

- A. Confirmation experiment
- B. Change management plan
- C. Sampling plan design
- D. Response surface methodology

105. A project requires the team to optimize settings after important factors have been identified. What should it apply?

- A. Confirmation experiment
- B. Response surface methodology
- C. Change management plan
- D. Sampling plan design

106. A Black Belt needs to verify that predicted improvement occurs under planned conditions. Which approach is most appropriate?

- A. Confirmation experiment
- B. Process capability analysis
- C. Control plan
- D. Confidence interval estimation

107. Which method directly helps a deployment team verify that predicted improvement occurs under planned conditions?

- A. Process capability analysis
- B. Confirmation experiment
- C. Control plan
- D. Confidence interval estimation

108. To verify that predicted improvement occurs under planned conditions, the Black Belt should use which tool?

- A. Confirmation experiment
- B. Process capability analysis
- C. Control plan
- D. Confidence interval estimation

109. Which technique best supports an effort to verify that predicted improvement occurs under planned conditions?

- A. Process capability analysis
- B. Control plan
- C. Confirmation experiment
- D. Confidence interval estimation

110. A project requires the team to verify that predicted improvement occurs under planned conditions. What should it apply?

- A. Process capability analysis
- B. Control plan
- C. Confidence interval estimation
- D. Confirmation experiment

111. A Black Belt needs to compare stable process output with customer specification limits. Which approach is most appropriate?

- A. Control chart selection
- B. Strategic project selection
- C. Process capability analysis
- D. Hypothesis testing

112. Which method directly helps a deployment team compare stable process output with customer specification limits?

- A. Process capability analysis
- B. Control chart selection
- C. Strategic project selection
- D. Hypothesis testing

113. To compare stable process output with customer specification limits, the Black Belt should use which tool?

- A. Control chart selection
- B. Strategic project selection
- C. Hypothesis testing
- D. Process capability analysis

114. Which technique best supports an effort to compare stable process output with customer specification limits?

- A. Control chart selection
- B. Process capability analysis
- C. Strategic project selection
- D. Hypothesis testing

115. A project requires the team to compare stable process output with customer specification limits. What should it apply?

- A. Control chart selection
- B. Process capability analysis
- C. Strategic project selection
- D. Hypothesis testing

116. A Black Belt needs to choose a chart matched to the data type and subgroup structure. Which approach is most appropriate?

- A. CUSUM chart
- B. Project portfolio management
- C. Power analysis
- D. Control chart selection

117. Which method directly helps a deployment team choose a chart matched to the data type and subgroup structure?

- A. CUSUM chart
- B. Project portfolio management
- C. Control chart selection
- D. Power analysis

118. To choose a chart matched to the data type and subgroup structure, the Black Belt should use which tool?

- A. Control chart selection
- B. CUSUM chart
- C. Project portfolio management
- D. Power analysis

119. Which technique best supports an effort to choose a chart matched to the data type and subgroup structure?

- A. CUSUM chart
- B. Project portfolio management
- C. Control chart selection
- D. Power analysis

120. A project requires the team to choose a chart matched to the data type and subgroup structure. What should it apply?

- A. CUSUM chart
- B. Project portfolio management
- C. Power analysis
- D. Control chart selection

121. A Black Belt needs to detect small sustained shifts that may not trigger a standard chart quickly. Which approach is most appropriate?

- A. Failure mode and effects analysis
- B. CUSUM chart
- C. Business case analysis
- D. Regression modeling

122. Which method directly helps a deployment team detect small sustained shifts that may not trigger a standard chart quickly?

- A. CUSUM chart
- B. Failure mode and effects analysis
- C. Business case analysis
- D. Regression modeling

123. To detect small sustained shifts that may not trigger a standard chart quickly, the Black Belt should use which tool?

- A. Failure mode and effects analysis
- B. Business case analysis
- C. CUSUM chart
- D. Regression modeling

124. Which technique best supports an effort to detect small sustained shifts that may not trigger a standard chart quickly?

- A. Failure mode and effects analysis
- B. Business case analysis
- C. Regression modeling
- D. CUSUM chart

125. A project requires the team to detect small sustained shifts that may not trigger a standard chart quickly. What should it apply?

- A. CUSUM chart
- B. Failure mode and effects analysis
- C. Business case analysis
- D. Regression modeling

126. A Black Belt needs to rank prospective failures by risk and prioritize prevention. Which approach is most appropriate?

- A. Poka-yoke design
- B. Failure mode and effects analysis
- C. Voice of customer deployment
- D. Residual analysis

127. Which method directly helps a deployment team rank prospective failures by risk and prioritize prevention?

- A. Poka-yoke design
- B. Voice of customer deployment
- C. Residual analysis
- D. Failure mode and effects analysis

128. To rank prospective failures by risk and prioritize prevention, the Black Belt should use which tool?

- A. Failure mode and effects analysis
- B. Poka-yoke design
- C. Voice of customer deployment
- D. Residual analysis

129. Which technique best supports an effort to rank prospective failures by risk and prioritize prevention?

- A. Poka-yoke design
- B. Voice of customer deployment
- C. Failure mode and effects analysis
- D. Residual analysis

130. A project requires the team to rank prospective failures by risk and prioritize prevention. What should it apply?

- A. Poka-yoke design
- B. Failure mode and effects analysis
- C. Voice of customer deployment
- D. Residual analysis

131. A Black Belt needs to prevent an error or make it immediately detectable at its source. Which approach is most appropriate?

- A. Lean value stream analysis
- B. Critical-to-quality flowdown
- C. Analysis of variance
- D. Poka-yoke design

132. Which method directly helps a deployment team prevent an error or make it immediately detectable at its source?

- A. Lean value stream analysis
- B. Poka-yoke design
- C. Critical-to-quality flowdown
- D. Analysis of variance

133. To prevent an error or make it immediately detectable at its source, the Black Belt should use which tool?

- A. Poka-yoke design
- B. Lean value stream analysis
- C. Critical-to-quality flowdown
- D. Analysis of variance

134. Which technique best supports an effort to prevent an error or make it immediately detectable at its source?

- A. Lean value stream analysis
- B. Critical-to-quality flowdown
- C. Poka-yoke design
- D. Analysis of variance

135. A project requires the team to prevent an error or make it immediately detectable at its source. What should it apply?

- A. Lean value stream analysis
- B. Critical-to-quality flowdown
- C. Analysis of variance
- D. Poka-yoke design

136. A Black Belt needs to identify flow, delays, information movement, and waste across an end-to-end process. Which approach is most appropriate?

- A. Lean value stream analysis
- B. Change management plan
- C. Measurement system analysis
- D. Nonparametric testing

137. Which method directly helps a deployment team identify flow, delays, information movement, and waste across an end-to-end process?

- A. Change management plan
- B. Measurement system analysis
- C. Lean value stream analysis
- D. Nonparametric testing

138. To identify flow, delays, information movement, and waste across an end-to-end process, the Black Belt should use which tool?

- A. Change management plan
- B. Lean value stream analysis
- C. Measurement system analysis
- D. Nonparametric testing

139. Which technique best supports an effort to identify flow, delays, information movement, and waste across an end-to-end process?

- A. Lean value stream analysis
- B. Change management plan
- C. Measurement system analysis
- D. Nonparametric testing

140. A project requires the team to identify flow, delays, information movement, and waste across an end-to-end process. What should it apply?

- A. Change management plan
- B. Lean value stream analysis
- C. Measurement system analysis
- D. Nonparametric testing

141. A Black Belt needs to prepare stakeholders, communication, training, and adoption actions for a change. Which approach is most appropriate?

- A. Control plan
- B. Gage R and R study
- C. Chi-square analysis
- D. Change management plan

142. Which method directly helps a deployment team prepare stakeholders, communication, training, and adoption actions for a change?

- A. Control plan
- B. Gage R and R study
- C. Change management plan
- D. Chi-square analysis

143. To prepare stakeholders, communication, training, and adoption actions for a change, the Black Belt should use which tool?

- A. Control plan
- B. Gage R and R study
- C. Change management plan
- D. Chi-square analysis

144. Which technique best supports an effort to prepare stakeholders, communication, training, and adoption actions for a change?

- A. Control plan
- B. Gage R and R study
- C. Chi-square analysis
- D. Change management plan

145. A project requires the team to prepare stakeholders, communication, training, and adoption actions for a change. What should it apply?

- A. Control plan
- B. Change management plan
- C. Gage R and R study
- D. Chi-square analysis

146. A Black Belt needs to document ownership, measures, limits, monitoring, and reaction actions after improvement. Which approach is most appropriate?

- A. Control plan
- B. Strategic project selection
- C. Sampling plan design
- D. Fractional factorial design

147. Which method directly helps a deployment team document ownership, measures, limits, monitoring, and reaction actions after improvement?

- A. Strategic project selection
- B. Sampling plan design
- C. Fractional factorial design
- D. Control plan

148. To document ownership, measures, limits, monitoring, and reaction actions after improvement, the Black Belt should use which tool?

- A. Strategic project selection
- B. Control plan
- C. Sampling plan design
- D. Fractional factorial design

149. Which technique best supports an effort to document ownership, measures, limits, monitoring, and reaction actions after improvement?

- A. Strategic project selection
- B. Sampling plan design
- C. Control plan
- D. Fractional factorial design

150. A project requires the team to document ownership, measures, limits, monitoring, and reaction actions after improvement. What should it apply?

- A. Control plan
- B. Strategic project selection
- C. Sampling plan design
- D. Fractional factorial design

Exam 25: Answer Key and Explanations

- 1. C** — The correct response is Strategic project selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 2. B** — The correct response is Strategic project selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 3. B** — The correct response is Strategic project selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 4. A** — The correct response is Strategic project selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 5. D** — The correct response is Strategic project selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 6. C** — The correct response is Project portfolio management. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.
- 7. A** — The correct response is Project portfolio management. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

8. D — The correct response is Project portfolio management. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

9. C — The correct response is Project portfolio management. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

10. B — The correct response is Project portfolio management. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

11. D — The correct response is Business case analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

12. C — The correct response is Business case analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

13. B — The correct response is Business case analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

14. A — The correct response is Business case analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

15. B — The correct response is Business case analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

16. C — The correct response is Voice of customer deployment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

17. A — The correct response is Voice of customer deployment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

18. D — The correct response is Voice of customer deployment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

19. C — The correct response is Voice of customer deployment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

20. D — The correct response is Voice of customer deployment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

21. A — The correct response is Critical-to-quality flowdown. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

22. B — The correct response is Critical-to-quality flowdown. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

23. B — The correct response is Critical-to-quality flowdown. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

24. A — The correct response is Critical-to-quality flowdown. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

25. D — The correct response is Critical-to-quality flowdown. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

26. C — The correct response is Measurement system analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

27. C — The correct response is Measurement system analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

28. A — The correct response is Measurement system analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

29. D — The correct response is Measurement system analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

30. B — The correct response is Measurement system analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

31. B — The correct response is Gage R and R study. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

32. D — The correct response is Gage R and R study. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

33. A — The correct response is Gage R and R study. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

34. C — The correct response is Gage R and R study. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

35. B — The correct response is Gage R and R study. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

36. A — The correct response is Sampling plan design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

37. D — The correct response is Sampling plan design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

38. C — The correct response is Sampling plan design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

39. C — The correct response is Sampling plan design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

40. A — The correct response is Sampling plan design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

41. D — The correct response is Confidence interval estimation. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

42. B — The correct response is Confidence interval estimation. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

43. C — The correct response is Confidence interval estimation. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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45. B — The correct response is Confidence interval estimation. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

46. A — The correct response is Hypothesis testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

47. C — The correct response is Hypothesis testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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49. D — The correct response is Hypothesis testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

50. B — The correct response is Hypothesis testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

51. D — The correct response is Power analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

52. B — The correct response is Power analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

53. C — The correct response is Power analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

54. A — The correct response is Power analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

55. C — The correct response is Power analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

56. D — The correct response is Regression modeling. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

57. B — The correct response is Regression modeling. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

58. A — The correct response is Regression modeling. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

59. A — The correct response is Regression modeling. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

60. B — The correct response is Regression modeling. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

61. D — The correct response is Residual analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

62. C — The correct response is Residual analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

63. A — The correct response is Residual analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

64. B — The correct response is Residual analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

65. C — The correct response is Residual analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

66. D — The correct response is Analysis of variance. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

67. D — The correct response is Analysis of variance. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

68. C — The correct response is Analysis of variance. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

69. A — The correct response is Analysis of variance. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

70. B — The correct response is Analysis of variance. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

71. A — The correct response is Nonparametric testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

72. D — The correct response is Nonparametric testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

73. C — The correct response is Nonparametric testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

74. B — The correct response is Nonparametric testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

75. A — The correct response is Nonparametric testing. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

76. B — The correct response is Chi-square analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

77. D — The correct response is Chi-square analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

78. C — The correct response is Chi-square analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

79. B — The correct response is Chi-square analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

80. A — The correct response is Chi-square analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

81. D — The correct response is Fractional factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

82. C — The correct response is Fractional factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

83. D — The correct response is Fractional factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

84. C — The correct response is Fractional factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

85. A — The correct response is Fractional factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

86. B — The correct response is Full factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

87. B — The correct response is Full factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

88. D — The correct response is Full factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

89. C — The correct response is Full factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

90. A — The correct response is Full factorial design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or

control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

91. D — The correct response is Randomization. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

92. B — The correct response is Randomization. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

93. A — The correct response is Randomization. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

94. C — The correct response is Randomization. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

95. D — The correct response is Randomization. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

96. A — The correct response is Blocking. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

97. C — The correct response is Blocking. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

98. B — The correct response is Blocking. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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101. B — The correct response is Response surface methodology. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

102. D — The correct response is Response surface methodology. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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105. B — The correct response is Response surface methodology. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation,

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106. A — The correct response is Confirmation experiment. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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111. C — The correct response is Process capability analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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116. D — The correct response is Control chart selection. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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121. B — The correct response is CUSUM chart. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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131. D — The correct response is Poka-yoke design. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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136. A — The correct response is Lean value stream analysis. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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141. D — The correct response is Change management plan. It addresses the project need stated in the scenario and supports disciplined decision making. The other choices are valuable Black Belt methods, but they answer different questions about strategy, measurement, analysis, experimentation, implementation, or control. Correct tool selection helps the team produce a valid conclusion and sustain the intended business result.

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