PRACTICE EXAM 2: CCAT-7 LEVEL 10 SIMULATION (176 QUESTIONS)

PART ONE — VERBAL BATTERY (60 questions, 30 minutes)

Section A — Verbal Analogies (Questions 1–24)

1. Surgeon is to scalpel as artist is to ____

A. canvas

B. studio

C. brush

D. painting

2. Whisper is to loud as tiptoe is to ____

A. stomp

B. quiet

C. shoe

D. walk

3. Petal is to rose as ____ is to oak

A. trunk

B. leaf

C. forest

D. seed

4. Paw is to dog as fin is to ____

A. ocean

B. scale

C. tail

D. fish

5. Tired is to exhausted as ____ is to enraged

A. angry

B. happy

C. calm

D. furious

6. Architect is to building as ____ is to symphony

A. orchestra

B. conductor

C. composer

D. musician

7. Gosling is to goose as joey is to ____

A. cub

B. kangaroo

C. pouch

D. Australia

8. Delicate is to fragile as enormous is to ____

A. tiny

B. tall

C. wide

D. gigantic

9. Sculptor is to clay as ____ is to fabric

A. tailor

B. shirt

C. needle

D. wool

10. Lion is to pride as bee is to ____

A. honey

B. flower

C. sting

D. swarm

11. Lullaby is to sleep as alarm is to ____

A. quiet

B. clock

C. wake

D. loud

12. Ocean is to vast as desert is to ____

A. hot

B. arid

C. sandy

D. wide

13. Ear is to hearing as eye is to ____

A. lens

B. tear

C. blink

D. sight

14. Marble is to statue as brick is to ____

A. wall

B. clay

C. cement

D. red

15. Winter is to cold as summer is to ____

A. sun

B. hot

C. vacation

D. swim

16. Pilot is to airplane as captain is to ____

A. crew

B. ocean

C. ship

D. uniform

17. Saturday is to weekend as Wednesday is to ____

A. school

B. tomorrow

C. middle

D. weekday

18. Shovel is to dig as broom is to ____

A. dust

B. sweep

C. floor

D. handle

19. Spider is to web as bird is to ____

A. nest

B. feather

C. tree

D. egg

20. Author is to novel as ____ is to map

A. explorer

B. traveler

C. cartographer

D. globe

21. Nibble is to bite as glance is to ____

A. eye

B. look

C. blink

D. notice

22. Flock is to sheep as school is to ____

A. student

B. learning

C. swimmer

D. fish

23. Pen is to ink as kettle is to ____

A. water

B. tea

C. metal

D. handle

24. Sapling is to tree as tadpole is to ____

A. pond

B. swim

C. frog

D. egg

Section B — Sentence Completion (Questions 25–44)

25. The blizzard was so ____ that visibility dropped to just a few metres beyond the windshield.

A. mild

B. fierce

C. brief

D. light

26. After running the marathon, the athletes felt completely ____ and collapsed onto the grass.

A. drained

B. energetic

C. anxious

D. curious

27. Although the math problem looked difficult, Marcus solved it with surprising ____.

A. confusion

B. struggle

C. ease

D. delay

28. The detective examined every ____ of evidence before concluding that the necklace had been misplaced.

A. amount

B. group

C. story

D. piece

29. The volcano had been ____ for over a century, but scientists detected new activity beneath its surface.

A. erupting

B. dormant

C. ancient

D. growing

30. Despite the heavy rain, the determined volunteers ____ delivering meals to elderly residents.

A. avoided

B. cancelled

C. persisted in

D. forgot about

31. The museum guide spoke in such a ____ voice that visitors at the back of the room could not hear her.

A. faint

B. booming

C. clear

D. cheerful

32. The new puppy was ____ around strangers but became affectionate once familiar with them.

A. fierce

B. eager

C. playful

D. timid

33. The chef tasted the soup, frowned, and added more salt to ____ the flavour.

A. enhance

B. ruin

C. cool

D. remove

34. The icy roads were ____ to drive on, so authorities advised everyone to stay home.

A. safe

B. hazardous

C. simple

D. familiar

35. Because the storm damaged the power lines, the town remained without electricity for two ____ days.

A. happy

B. brief

C. minor

D. consecutive

36. The hikers were ____ when they realised they had been walking in circles for nearly an hour.

A. proud

B. excited

C. dismayed

D. comforted

37. After studying for weeks, Lila felt ____ that she would do well on the science fair presentation.

A. confident

B. uncertain

C. anxious

D. confused

38. The ancient ruins were ____ in 1872 by archaeologists who had been searching for them for decades.

A. built

B. hidden

C. forgotten

D. discovered

39. The crowded marketplace was filled with the ____ of vendors calling out prices and customers haggling.

A. silence

B. echo

C. clamour

D. whisper

40. The little kitten was so ____ that it could easily fit inside a teacup.

A. heavy

B. tiny

C. fluffy

D. playful

41. The librarian asked the students to keep their voices ____ so others could continue reading peacefully.

A. cheerful

B. clear

C. excited

D. low

42. The sunflower turned its head to ____ the path of the sun across the sky throughout the day.

A. follow

B. avoid

C. block

D. shadow

43. Although the recipe seemed complicated at first, the step-by-step instructions made it ____ to prepare.

A. impossible

B. straightforward

C. expensive

D. seasonal

44. The marine biologist studied dolphins for many years to understand their ____ behaviours and social bonds.

A. random

B. lonely

C. complex

D. simple

Section C — Verbal Classification (Questions 45–60)

45. Ruby, emerald, sapphire — which word belongs with these?

A. stone

B. ring

C. shiny

D. diamond

46. Oak, maple, pine — which word belongs with these?

A. forest

B. branch

C. birch

D. leaf

47. Saxophone, trumpet, trombone — which word belongs with these?

A. clarinet

B. drum

C. guitar

D. piano

48. Mars, Jupiter, Venus — which word belongs with these?

A. moon

B. Neptune

C. star

D. orbit

49. Hurricane, tornado, blizzard — which word belongs with these?

A. cloud

B. wind

C. rain

D. typhoon

50. Chuckle, giggle, snicker — which word belongs with these?

A. chortle

B. cry

C. sob

D. yell

51. Square root, division, multiplication — which word belongs with these?

A. equation

B. number

C. subtraction

D. answer

52. Mississippi, Amazon, Nile — which word belongs with these?

A. lake

B. Yangtze

C. ocean

D. mountain

53. Mercury, Saturn, Earth — which word belongs with these?

A. Uranus

B. comet

C. asteroid

D. galaxy

54. Pentagon, hexagon, octagon — which word belongs with these?

A. circle

B. cube

C. sphere

D. heptagon

55. June, October, March — which word belongs with these?

A. winter

B. August

C. season

D. holiday

56. Adore, cherish, treasure — which word belongs with these?

A. ignore

B. dislike

C. revere

D. disregard

57. Pasta, rice, bread — which word belongs with these?

A. oatmeal

B. carrot

C. apple

D. cheese

58. Biceps, quadriceps, triceps — which word belongs with these?

A. bone

B. tendon

C. hamstring

D. nerve

59. French, Spanish, Italian — which word belongs with these?

A. Europe

B. country

C. flag

D. Portuguese

60. Sneaker, sandal, boot — which word belongs with these?

A. sock

B. loafer

C. lace

D. heel

PART TWO — QUANTITATIVE BATTERY (54 questions, 30 minutes)

Section D — Number Analogies (Questions 61–78)

61. (2, 6) is related to (5, 9). What number completes (10, ?)?

A. 14

B. 12

C. 15

D. 13

62. (8, 4) is related to (14, 7). What number completes (20, ?)?

A. 5

B. 8

C. 10

D. 15

63. (3, 9) is related to (4, 16). What number completes (5, ?)?

A. 10

B. 15

C. 20

D. 25

64. (12, 4) is related to (15, 5). What number completes (21, ?)?

A. 6

B. 7

C. 8

D. 9

65. (1, 3) is related to (4, 12). What number completes (7, ?)?

A. 21

B. 18

C. 14

D. 24

66. (20, 15) is related to (18, 13). What number completes (12, ?)?

A. 10

B. 8

C. 9

D. 7

67. (2, 4) is related to (5, 25). What number completes (3, ?)?

A. 6

B. 9

C. 12

D. 15

68. (6, 30) is related to (8, 40). What number completes (10, ?)?

A. 60

B. 45

C. 50

D. 55

69. (25, 5) is related to (36, 6). What number completes (49, ?)?

A. 4

B. 5

C. 6

D. 7

70. (4, 8) is related to (7, 14). What number completes (9, ?)?

A. 18

B. 16

C. 20

D. 17

71. (15, 11) is related to (22, 18). What number completes (30, ?)?

A. 24

B. 25

C. 26

D. 28

72. (3, 12) is related to (4, 16). What number completes (6, ?)?

A. 22

B. 24

C. 26

D. 28

73. (36, 6) is related to (49, 7). What number completes (64, ?)?

A. 8

B. 9

C. 7

D. 10

74. (5, 13) is related to (8, 19). What number completes (10, ?)?

A. 17

B. 19

C. 21

D. 23

75. (40, 5) is related to (32, 4). What number completes (24, ?)?

A. 2

B. 4

C. 3

D. 5

76. (2, 10) is related to (3, 15). What number completes (4, ?)?

A. 18

B. 20

C. 22

D. 25

77. (9, 4) is related to (14, 9). What number completes (20, ?)?

A. 11

B. 13

C. 14

D. 15

78. (7, 21) is related to (5, 15). What number completes (8, ?)?

A. 24

B. 22

C. 26

D. 28

Section E — Number Series (Questions 79–96)

79. 4, 8, 12, 16, ?

A. 18

B. 20

C. 22

D. 24

80. 1, 2, 4, 7, 11, ?

A. 14

B. 15

C. 17

D. 16

81. 100, 91, 82, 73, ?

A. 64

B. 65

C. 63

D. 62

82. 1, 3, 6, 10, 15, ?

A. 18

B. 19

C. 21

D. 25

83. 2, 6, 18, 54, ?

A. 108

B. 162

C. 144

D. 180

84. 45, 38, 31, 24, ?

A. 17

B. 18

C. 16

D. 19

85. 5, 11, 23, 47, ?

A. 89

B. 91

C. 93

D. 95

86. 128, 64, 32, 16, ?

A. 4

B. 6

C. 8

D. 10

87. 7, 11, 17, 25, ?

A. 31

B. 33

C. 34

D. 35

88. 1, 8, 27, 64, ?

A. 100

B. 125

C. 120

D. 81

89. 100, 95, 85, 70, ?

A. 50

B. 55

C. 60

D. 65

90. 2, 6, 12, 20, 30, ?

A. 38

B. 40

C. 42

D. 44

91. 3, 5, 9, 17, 33, ?

A. 59

B. 61

C. 63

D. 65

92. 81, 27, 9, 3, ?

A. 1

B. 2

C. 0

D. 3

93. 4, 9, 19, 39, ?

A. 77

B. 79

C. 81

D. 83

94. 1, 2, 4, 7, 11, 16, ?

A. 20

B. 21

C. 22

D. 23

95. 144, 72, 36, 18, ?

A. 9

B. 10

C. 12

D. 6

96. 5, 15, 45, 135, ?

A. 270

B. 350

C. 380

D. 405

Section F — Number Puzzles (Questions 97–114)

97. ? × 7 = 56

A. 6

B. 7

C. 8

D. 9

98. 45 ÷ ? = 9

A. 4

B. 5

C. 6

D. 7

99. If ☆ = 6, what is ☆ + ☆ + 4?

A. 16

B. 14

C. 18

D. 12

100. ? − 12 = 8 × 3

A. 24

B. 28

C. 32

D. 36

101. If △ × 4 = 28, what is △?

A. 6

B. 7

C. 8

D. 9

102. $15 + ? = 9 \times 4$

A. 17

B. 19

C. 21

D. 23

103. If $\diamond = 5$ and $\circ = 8$, what is $\diamond \times \circ - 10$?

A. 30

B. 32

C. 25

D. 35

104. $72 \div ? = 9$

A. 6

B. 7

C. 9

D. 8

105. If $\triangle + 9 = 17$, what is $\triangle \times 5$?

A. 35

B. 40

C. 45

D. 50

106. ? + ? = 18

A. 6

B. 7

C. 8

D. 9

107. If ◇ = 4, what is ◇ × 3 + 5?

A. 13

B. 15

C. 17

D. 19

108. 60 − ? = 35 + 4

A. 21

B. 23

C. 19

D. 25

109. If △ × ○ = 24 and △ = 6, what is ○?

A. 6

B. 8

C. 3

D. 4

110. $9 \times ? + 7 = 70$

A. 6

B. 7

C. 8

D. 9

111. $? - 14 = 50 \div 2$

A. 35

B. 37

C. 39

D. 41

112. If ☆ = 9, what is ☆ × 2 − 7?

A. 11

B. 13

C. 9

D. 15

113. $4 \times ? = 36 + 4$

A. 9

B. 10

C. 11

D. 12

114. If △ + ○ = 20 and △ = 12, what is ○?

A. 6

B. 7

C. 8

D. 9

PART THREE — NONVERBAL BATTERY (62 questions, 30 minutes)

Section G — Figure Matrices (Questions 115–136)

115. Which figure completes the 3×3 grid?

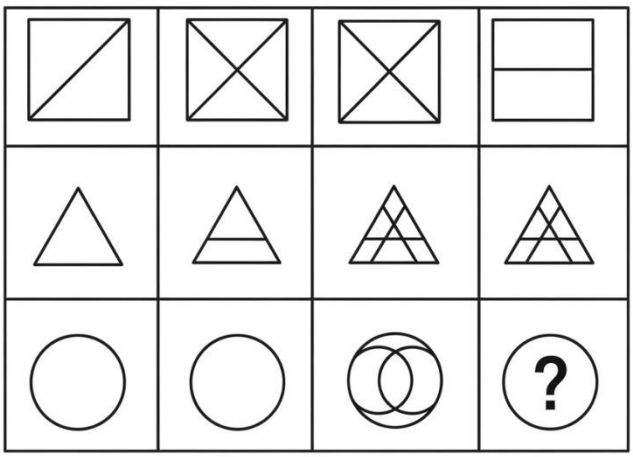


Figure PQ-1

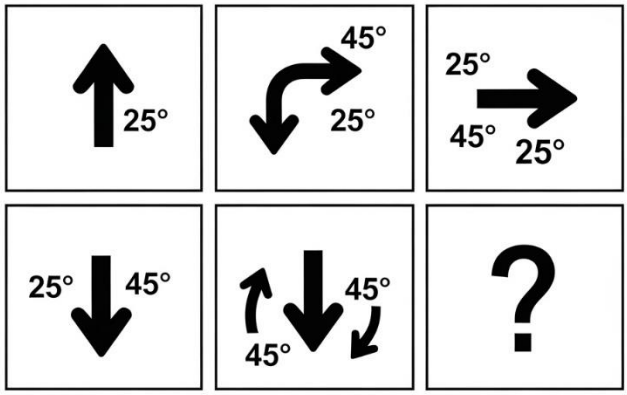
A. a circle with no internal lines

B. a circle with one internal line

C. a circle with two internal lines

D. a circle with three internal lines

116. Which figure completes the 3×3 grid?



A. an arrow pointing up

B. an arrow pointing left

C. an arrow pointing down-right

D. an arrow pointing right

117. Which figure completes the 3×3 grid?

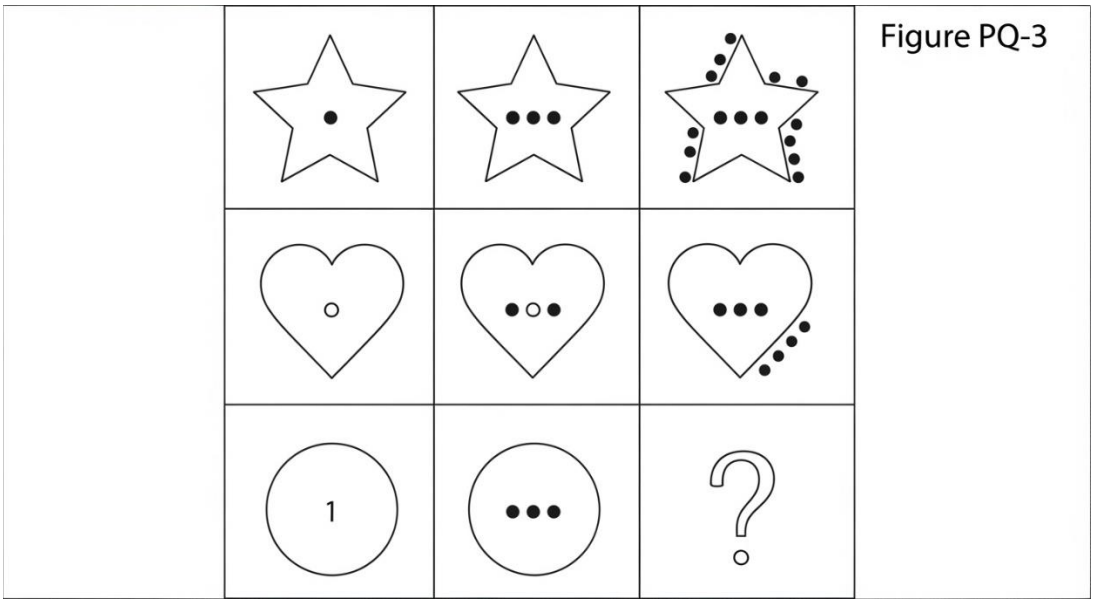


Figure PQ-3

A. a circle with 4 dots

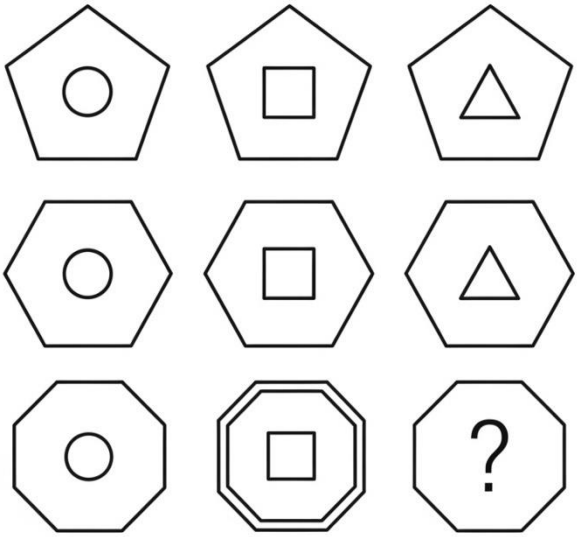
B. a circle with 6 dots

C. a circle with 5 dots

D. a circle with 7 dots

118. Which figure completes the 3×3 grid?

FIGURE PQ-4



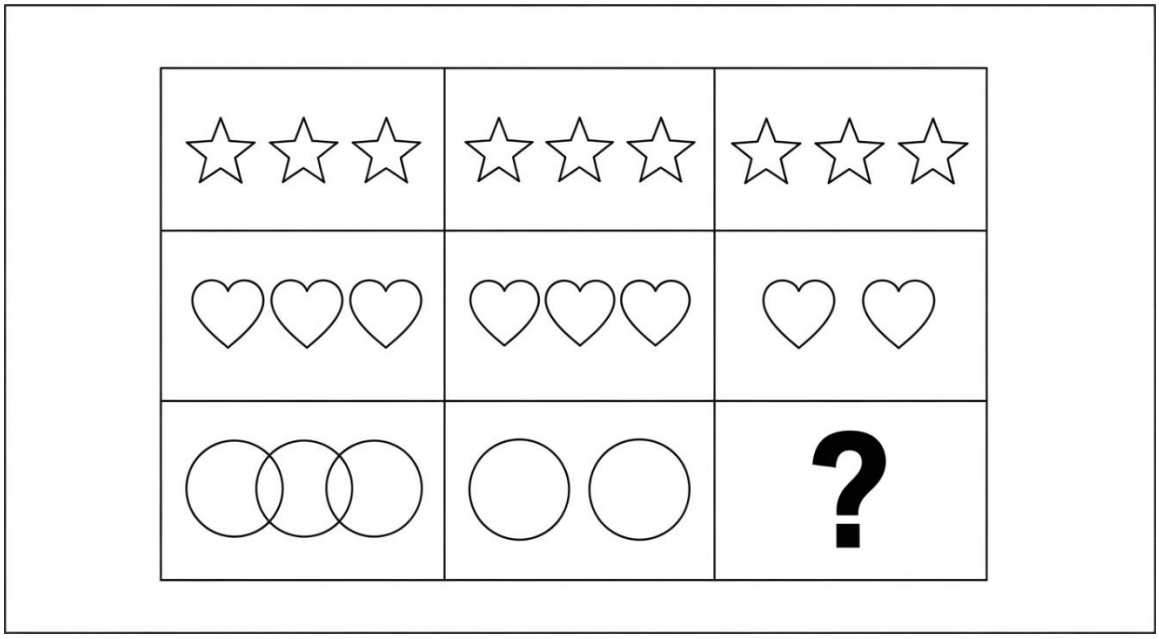
A. an octagon containing a triangle

B. a hexagon containing a triangle

C. an octagon containing a circle

D. an octagon containing a square

119. Which figure completes the 3×3 grid?



A. 0 circles

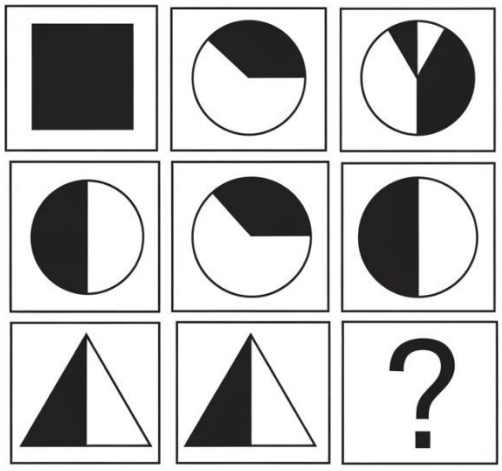
B. 1 circle

C. 2 circles

D. 3 circles

120. Which figure completes the 3×3 grid?

Figure PQ-6



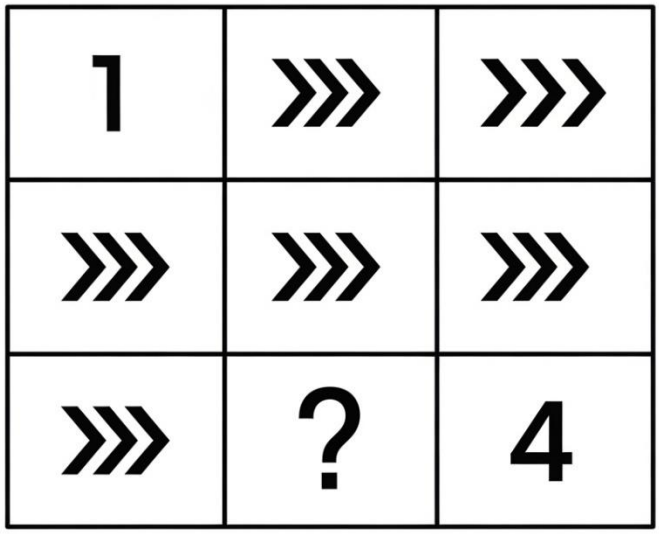
A. a fully black triangle

B. a triangle with no shading

C. a triangle with its left side black

D. a triangle with its right side black

121. Which figure completes the 3×3 grid?



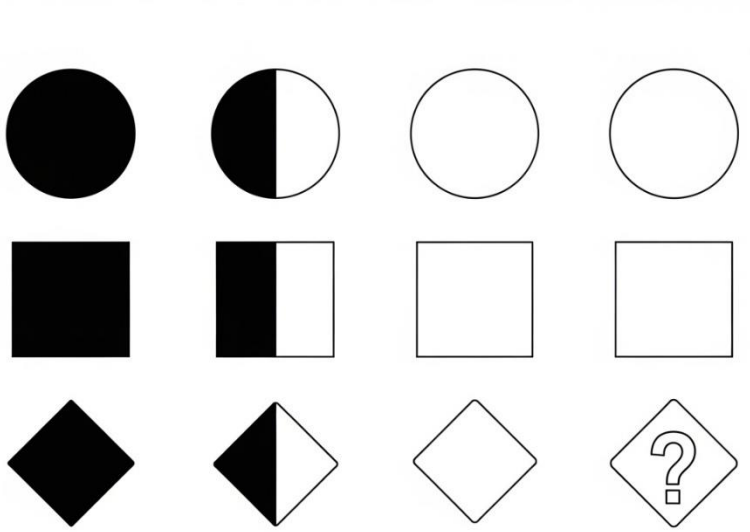
A. 3 arrows

B. 4 arrows

C. 5 arrows

D. 6 arrows

122. Which figure completes the 3×3 grid?



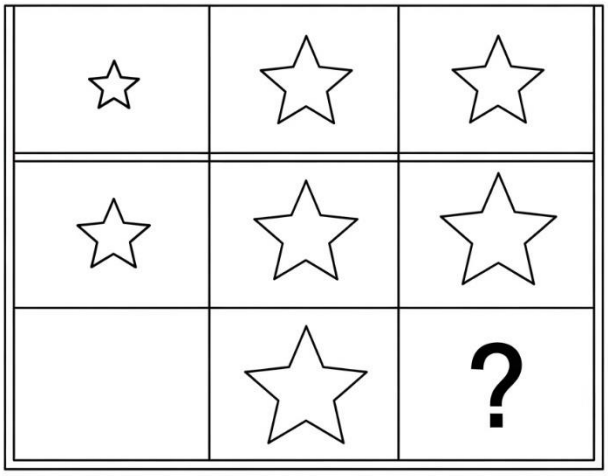
A. an outlined diamond with no fill

B. a half-shaded diamond

C. a solid black diamond

D. a striped diamond

123. Which figure completes the 3×3 grid?



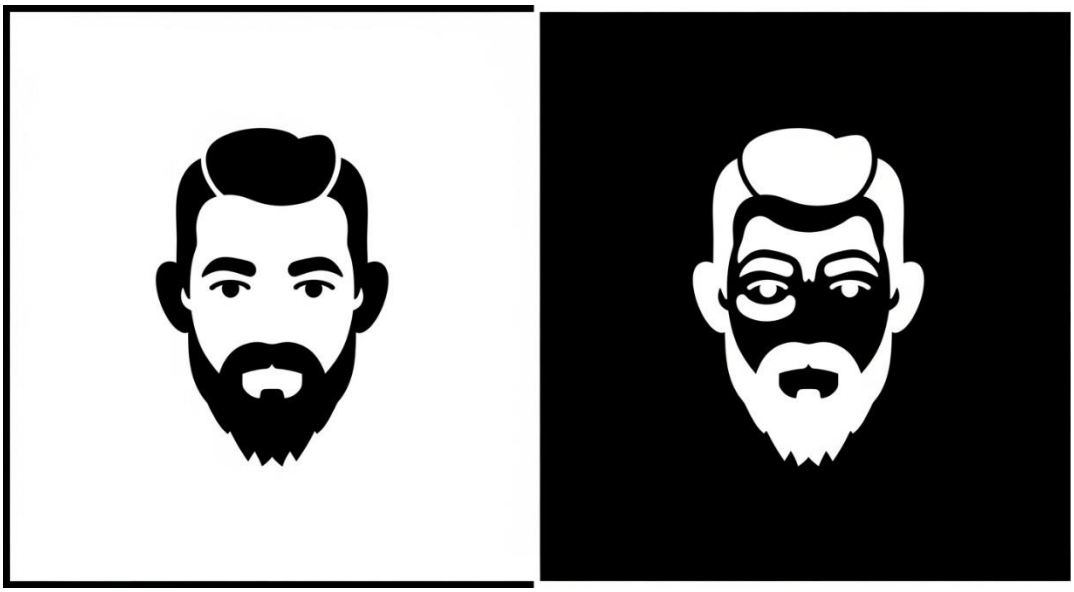
A. a tiny star

B. a small star

C. a medium star

D. an extra-large star

124. Which figure completes the 3×3 grid?



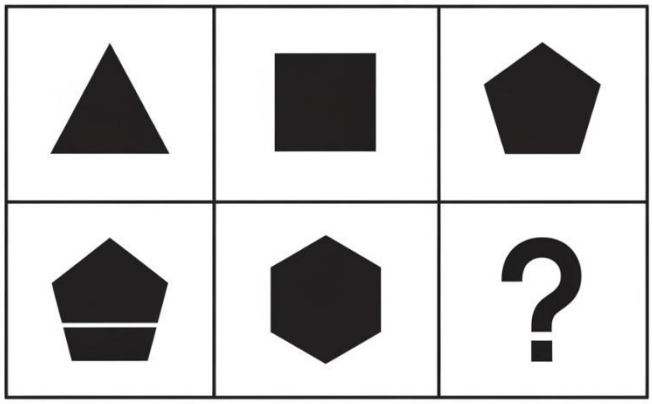
A. a black triangle

B. a white triangle

C. a striped triangle

D. a grey triangle

125. Which figure completes the 3×3 grid?



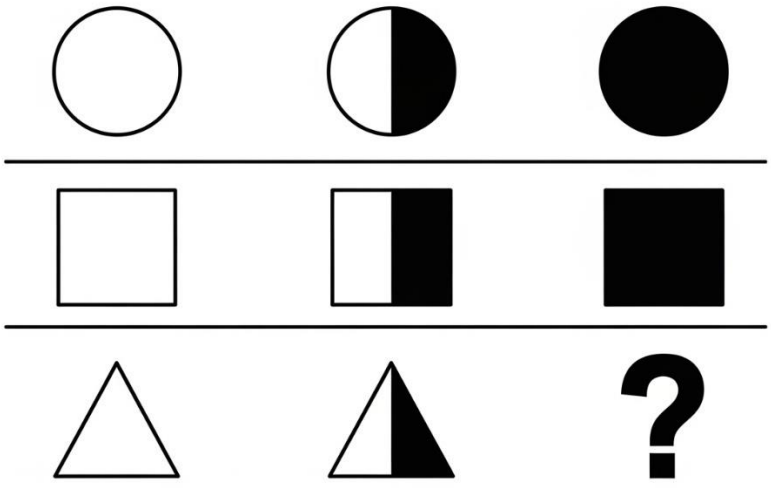
A. a heptagon (7 sides)

B. a pentagon (5 sides)

C. a hexagon (6 sides)

D. an octagon (8 sides)

126. Which figure completes the 3×3 grid?



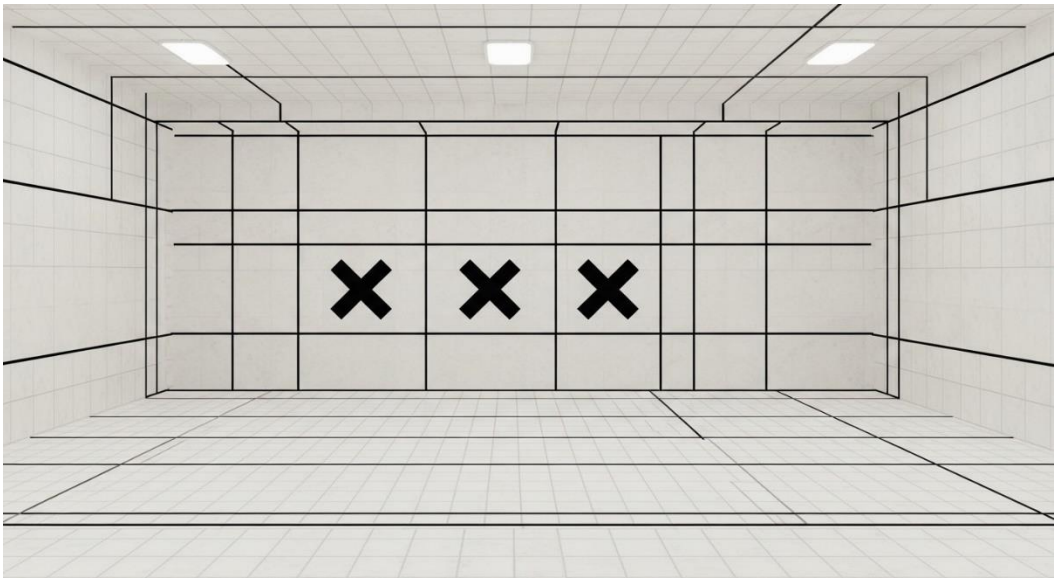
A. a striped triangle

B. a dotted triangle

C. a fully black triangle

D. an outlined triangle

127. Which figure completes the 3×3 grid?



A. 4 stars

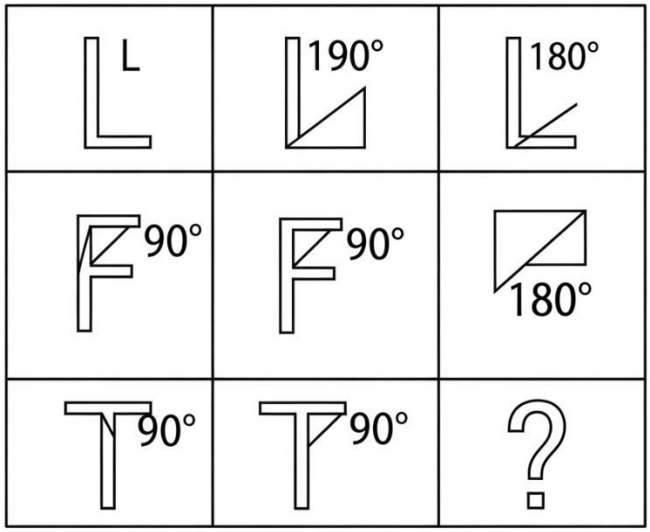
B. 5 stars

C. 6 stars

D. 7 stars

128. Which figure completes the 3×3 grid?

FIGUR PQ-14



A. T rotated 90° counterclockwise

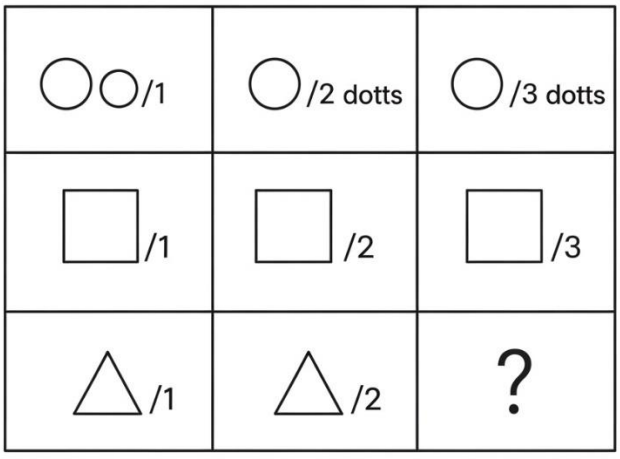
B. T upright

C. T mirrored

D. T rotated 180°

129. Which figure completes the 3×3 grid?

Figurr PQ-15



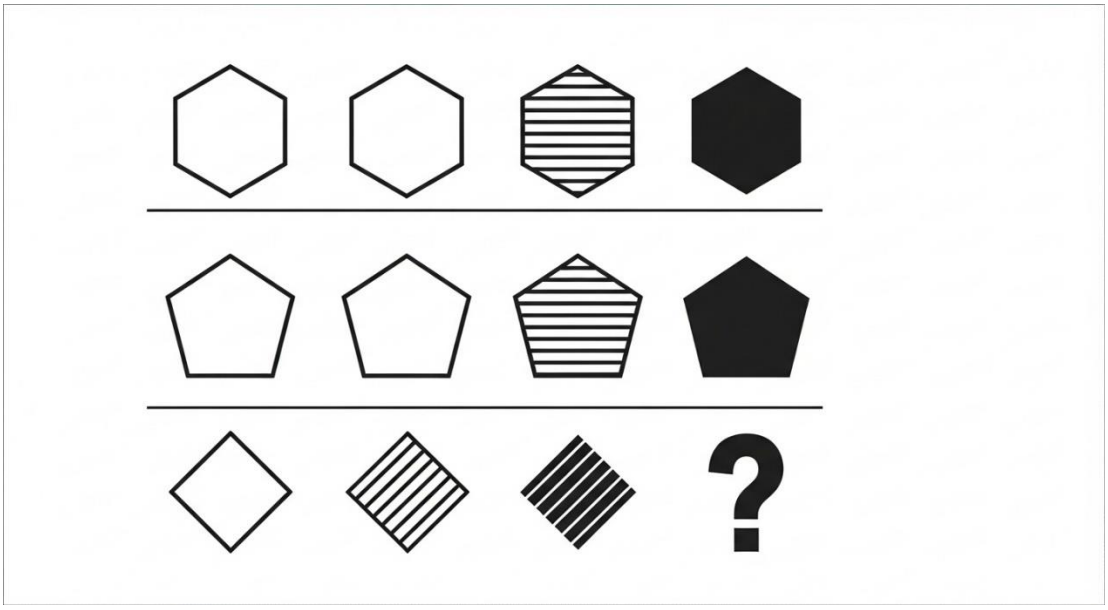
A. a triangle with 3 dots inside

B. a triangle with 2 dots inside

C. a triangle with 1 dot inside

D. a triangle with 4 dots inside

130. Which figure completes the 3×3 grid?



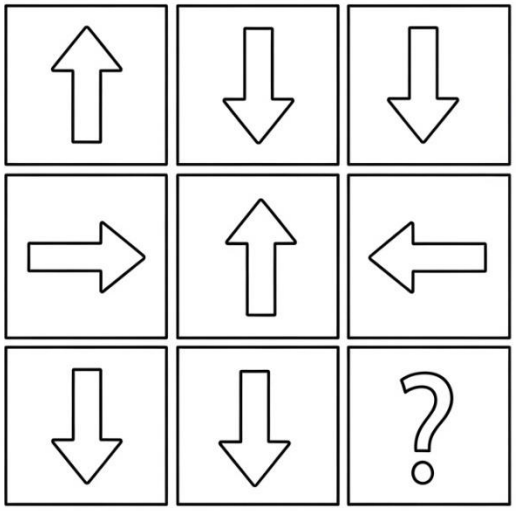
A. a striped diamond

B. an outlined diamond

C. a solid black diamond

D. a dotted diamond

131. Which figure completes the 3×3 grid?



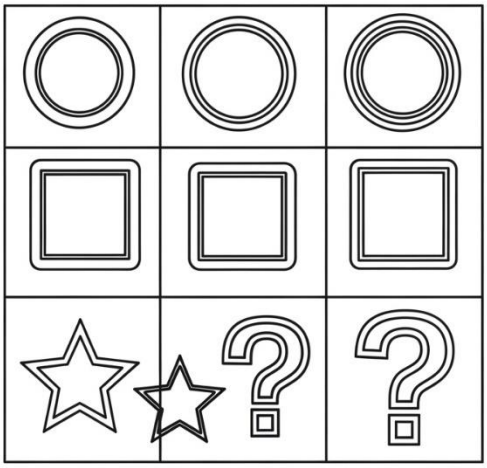
A. an arrow left

B. an arrow down

C. an arrow right

D. an arrow up

132. Which figure completes the 3×3 grid?



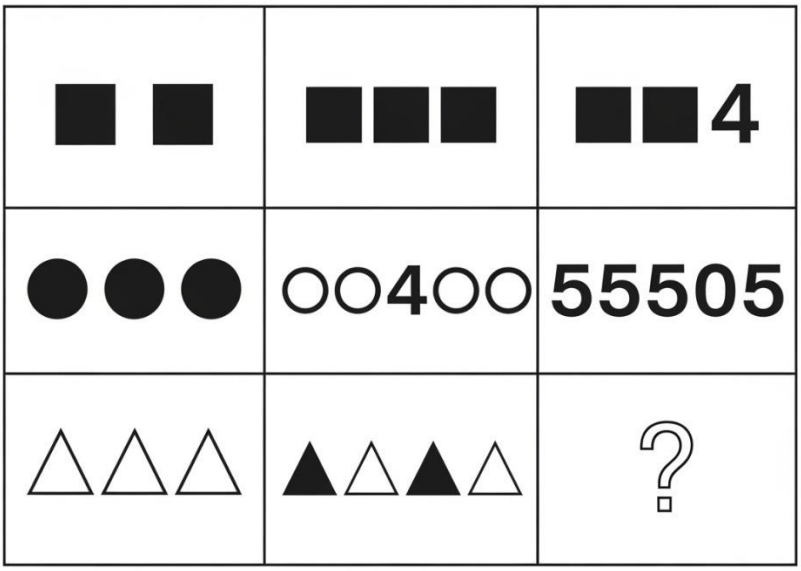
A. a star with no outline

B. a star with thick outline

C. a star with thin outline

D. a star with medium outline

133. Which figure completes the 3×3 grid?



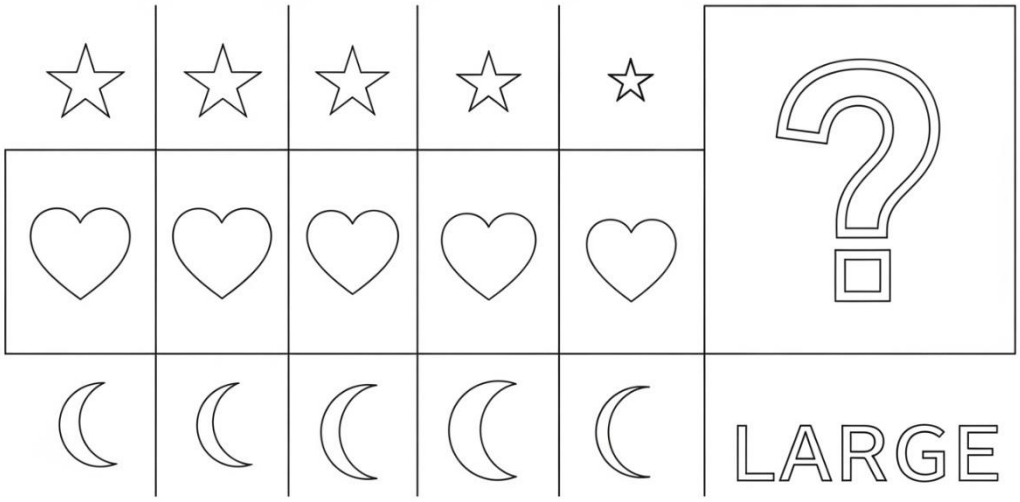
A. 4 triangles

B. 5 triangles

C. 6 triangles

D. 7 triangles

134. Which figure completes the 3×3 grid?



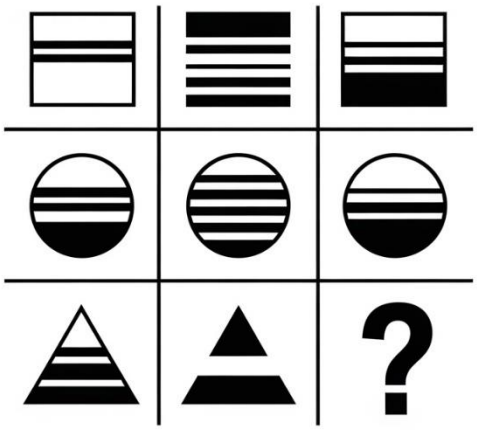
A. a large crescent moon

B. a small crescent moon

C. a medium crescent moon

D. a tiny crescent moon

135. Which figure completes the 3×3 grid?



A. a triangle with 4 stripes

B. a triangle with 3 stripes

C. a triangle with 2 stripes

D. a triangle with 1 stripe

136. Which figure completes the 3×3 grid?

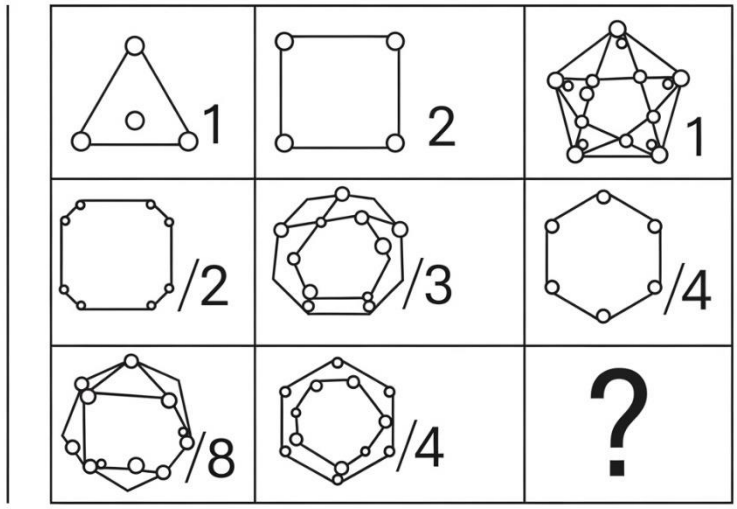


Figure PQ-22

A. a hexagon with 4 dots

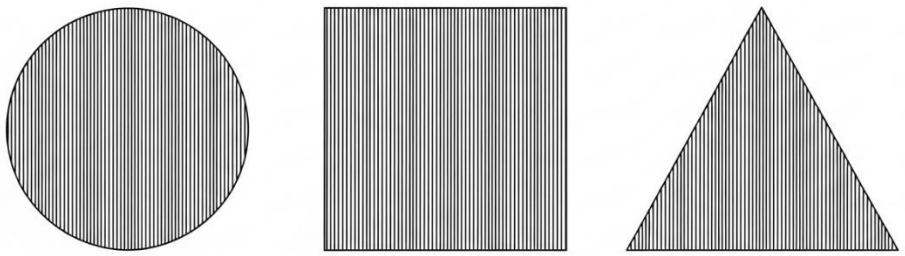
B. an octagon with 6 dots

C. a pentagon with 5 dots

D. a heptagon with 5 dots

Section H — Figure Classification (Questions 137–158)

137. Which figure belongs with the three given?



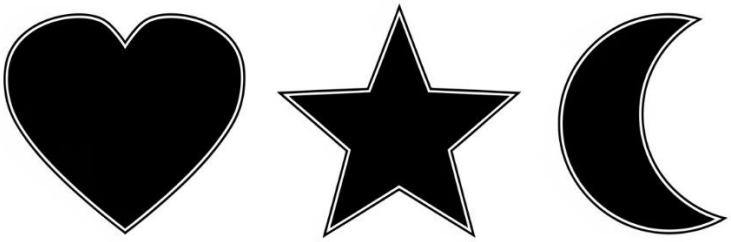
A. a pentagon filled with vertical stripes

B. a solid black hexagon

C. a circle filled with dots

D. an empty rectangle

138. Which figure belongs with the three given?



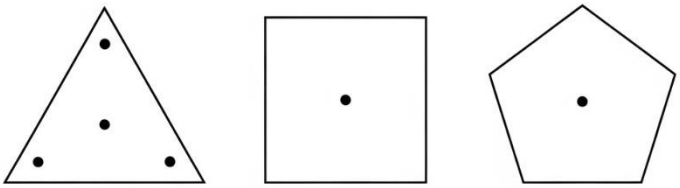
A. an outlined heart

B. a dotted star

C. a striped moon

D. a fully shaded diamond

139. Which figure belongs with the three given?



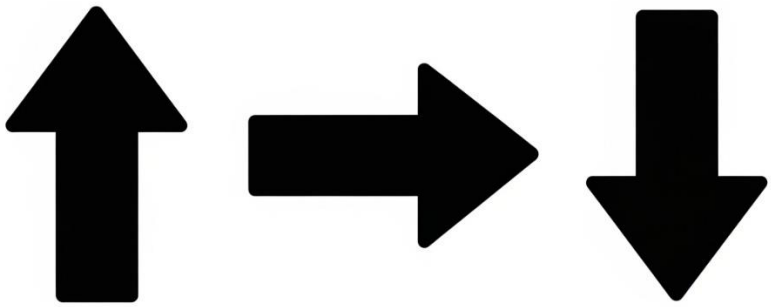
A. a circle with no dot

B. a hexagon with a small dot inside

C. an arrow with a dot beside it

D. a triangle with three dots

140. Which figure belongs with the three given?



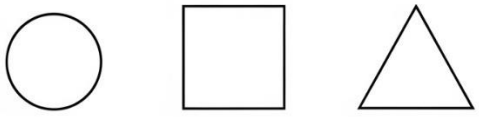
A. a white star

B. a black square

C. a black arrow pointing left

D. a black circle

141. Which figure belongs with the three given?



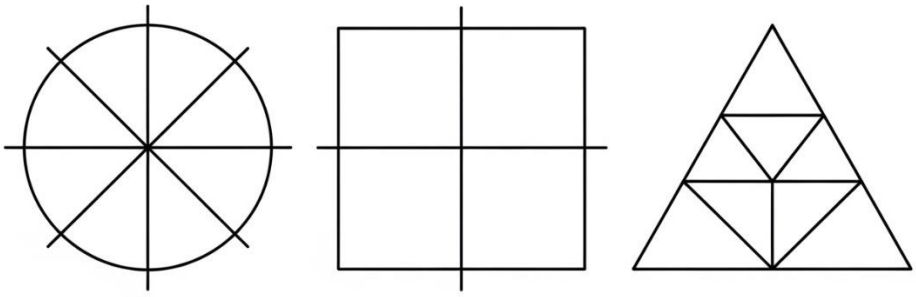
A. a small white pentagon

B. a large black circle

C. a small striped square

D. a medium grey triangle

142. Which figure belongs with the three given?



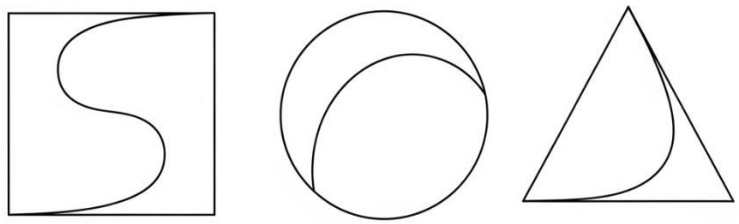
A. a pentagon with no internal divisions

B. a hexagon with 3 sections

C. a rectangle divided into 4 equal parts

D. an oval with no divisions

143. Which figure belongs with the three given?



A. a pentagon with a straight line inside

B. a hexagon with no internal lines

C. a square with a straight line inside

D. a pentagon with a curved line inside

144. Which figure belongs with the three given?

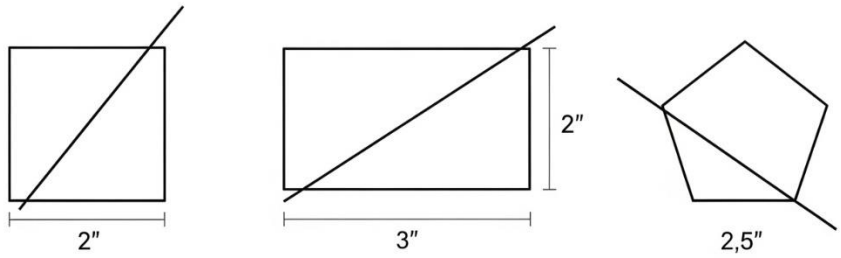


Figure PQ-30

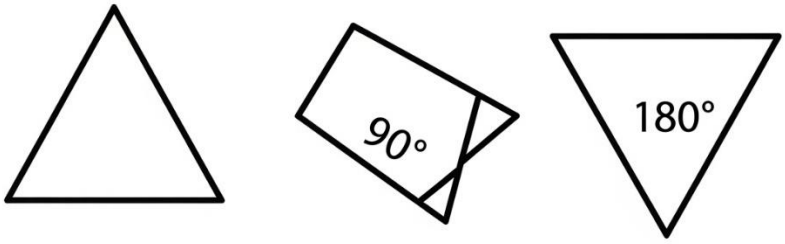
A. a circle with a horizontal line

B. a hexagon with one diagonal line

C. a triangle with no lines

D. a square with two diagonal lines

145. Which figure belongs with the three given?



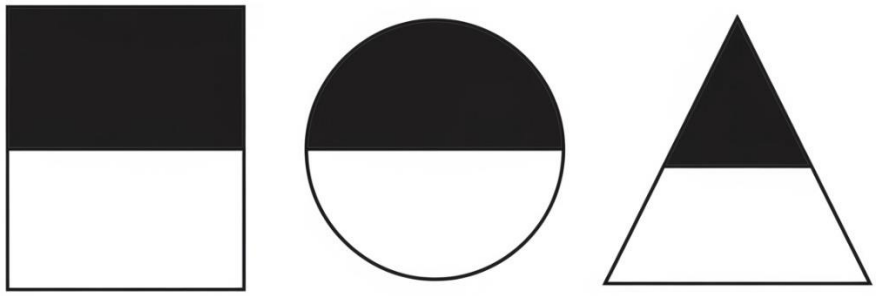
A. a right-angled triangle

B. a square pointing diagonally

C. an equilateral triangle pointing left

D. a pentagon pointing up

146. Which figure belongs with the three given?



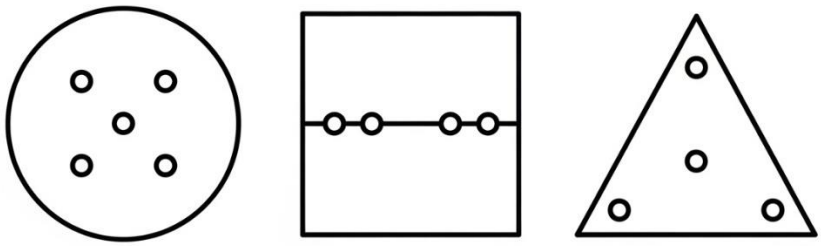
A. a pentagon with the top portion black

B. a square with the bottom half black

C. an entirely black circle

D. a triangle with no shading

147. Which figure belongs with the three given?



A. a pentagon with 2 dots

B. a hexagon with 4 evenly spaced dots inside

C. a circle with 6 dots

D. a triangle with 3 dots

148. Which figure belongs with the three given?

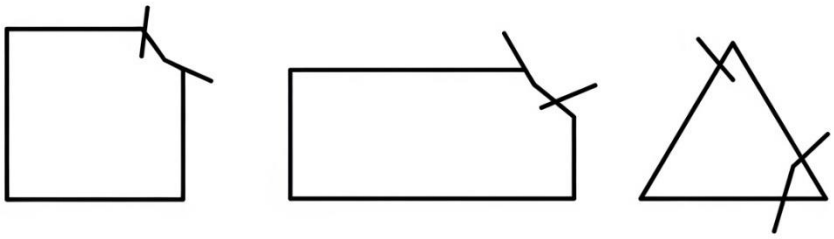
A. a large white star

B. a small outlined heart

C. a small grey moon

D. a small black sun

149. Which figure belongs with the three given?



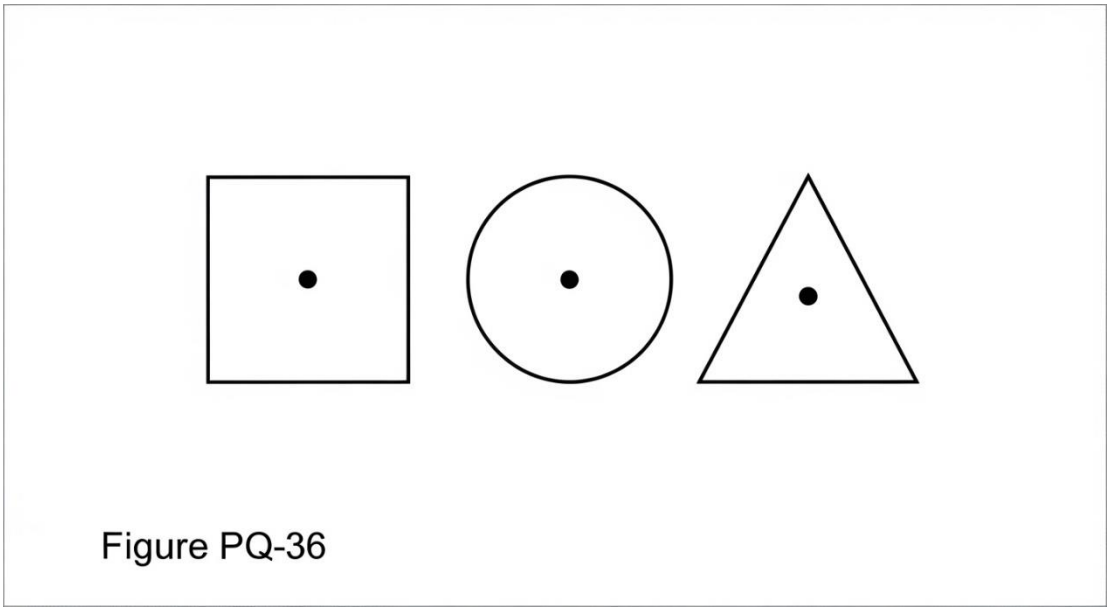
A. a pentagon with the top-right corner cut off

B. a circle with no corners removed

C. a hexagon with the bottom-left corner cut off

D. a square with the top-left corner cut off

150. Which figure belongs with the three given?



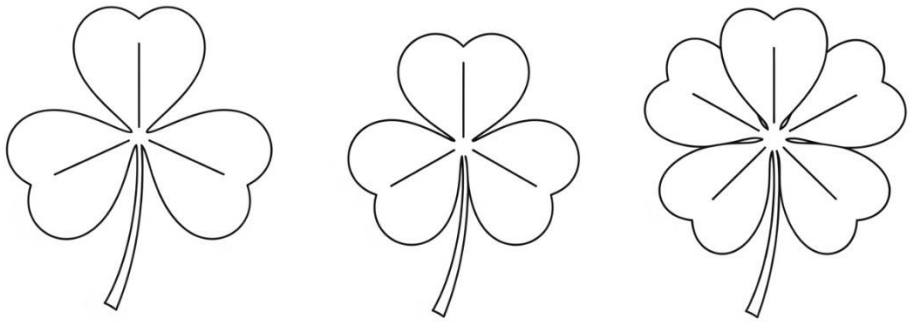
A. a solid black square

B. an outlined pentagon with no centre dot

C. an outlined pentagon with a small filled circle in the centre

D. a circle with multiple dots

151. Which figure belongs with the three given?



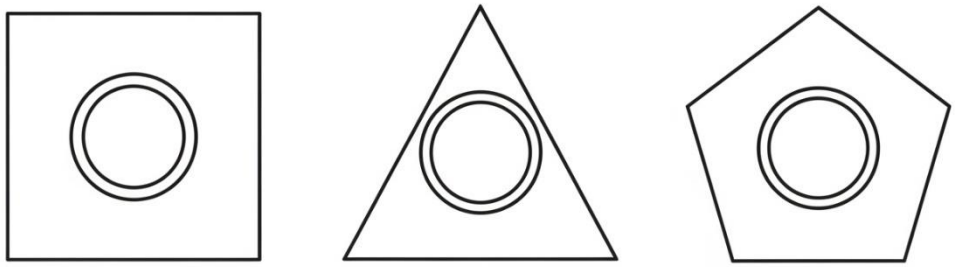
A. a single straight line

B. a 6-leaf clover

C. an X mark

D. a triangle

152. Which figure belongs with the three given?



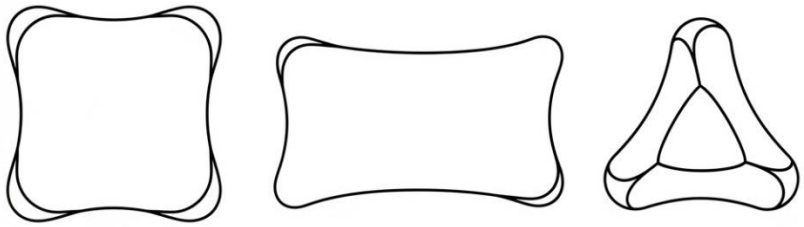
A. a circle with a smaller square inside

B. a triangle with a smaller triangle inside

C. a pentagon with a smaller triangle inside

D. a hexagon with a smaller circle inside

153. Which figure belongs with the three given?



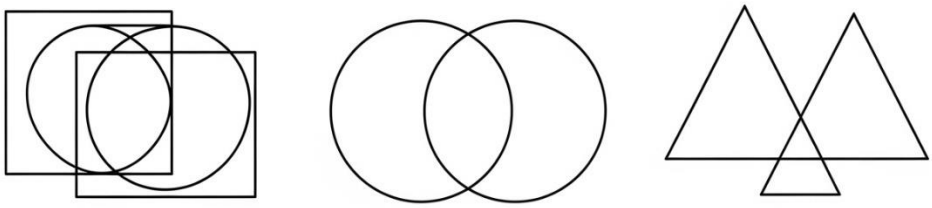
A. a pentagon with rounded corners

B. a perfect circle

C. a square with sharp corners

D. a triangle with sharp corners

154. Which figure belongs with the three given?



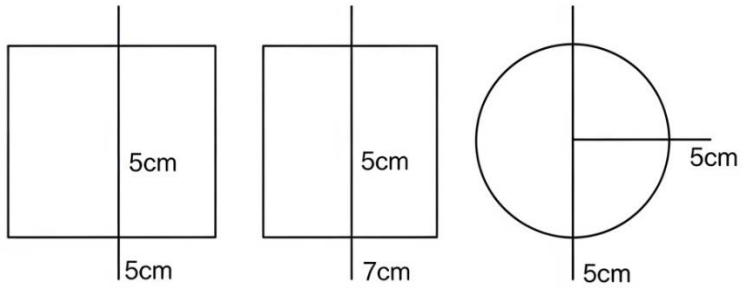
A. a single square alone

B. a circle inside a square

C. two pentagons overlapping

D. three separate triangles

155. Which figure belongs with the three given?



A. a square split horizontally

B. a triangle with no division

C. a circle with 4 sections

D. a pentagon split into 2 equal halves by a vertical line

156. Which figure belongs with the three given?

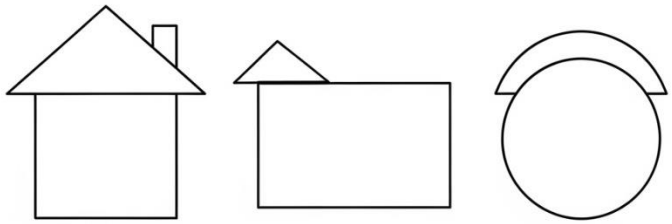
A. a square with no internal markings

B. a pentagon with a star drawn inside

C. a circle with a heart inside

D. a star with a star inside

157. Which figure belongs with the three given?



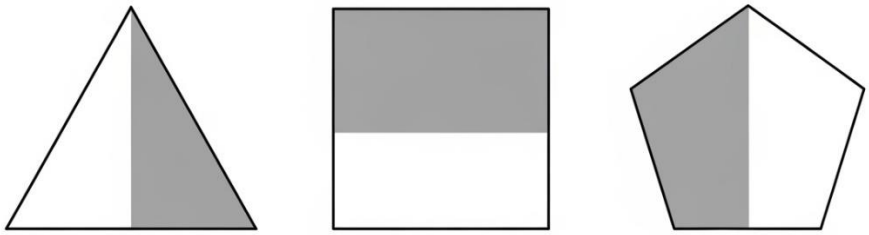
A. a pentagon with a small triangle stacked on top

B. a square with nothing on top

C. a triangle with a square on top

D. a circle with another circle on top

158. Which figure belongs with the three given?



A. a circle with a grey portion

B. a triangle with all sides grey

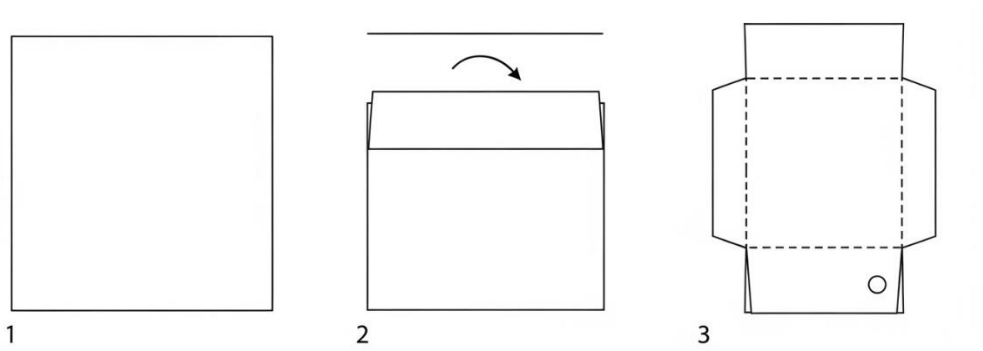
C. a hexagon with one side coloured grey

D. a square with all sides grey

Section I — Paper Folding (Questions 159–176)

159. A square paper is folded in half along a horizontal centre line — the top half folds down to meet the bottom half. A hole is then punched through both layers, in the lower-right corner of the folded rectangle. When the paper is unfolded back to a flat square, what does it look like?

Figure PQ-45



A. One hole in the lower-right corner only

B. Two holes — one in the upper-right and one in the lower-right

C. Two holes in the lower corners

D. Four holes in all four corners

160. A square paper is folded in half along a vertical centre line, then folded in half along a horizontal centre line. A hole is punched through all layers, in the upper-right corner of the resulting small square. When the paper is unfolded, what does it look like?

A. One hole in the upper-right

B. Two holes in the upper corners

C. Two holes diagonally placed

D. Four holes in all four corners

161. A square paper is folded diagonally from the bottom-left corner to the top-right corner. A hole is punched through both layers in the centre of the resulting triangle. When the paper is unfolded, what does it look like?

A. One hole at the centre

B. Four holes

C. Two holes mirrored across the diagonal

D. Three holes

162. A square paper is folded in half along a vertical centre line. A hole is punched through both layers in the exact centre of the folded rectangle. When the paper is unfolded, what does it look like?

A. Two holes side by side at the horizontal middle

B. One hole in the centre

C. Four holes

D. Two holes vertically stacked

163. A square paper is folded in half along a horizontal centre line, then in half along a vertical centre line. A hole is punched through all layers in the lower-left corner of the resulting small square. When the paper is unfolded, what does it look like?

A. One hole in the lower-left

B. Two holes in the lower corners

C. Two holes diagonally placed

D. Four holes in all four corners

164. A square paper is folded in half along a vertical centre line. A hole is punched through both layers near the top edge of the folded rectangle (not at a corner). When the paper is unfolded, what does it look like?

A. One hole near the top edge

B. Two holes near the top, mirrored on either side of the centre

C. Two holes at the bottom

D. Four holes

165. A square paper is folded diagonally from the top-left corner to the bottom-right corner. A hole is punched through both layers near the top edge of the resulting triangle. When the paper is unfolded, what does it look like?

A. One hole near the top

B. Four holes

C. Two holes mirrored across the diagonal

D. Three holes

166. A square paper is folded in half along a horizontal centre line. A hole is punched through both layers exactly on the fold line, at the horizontal centre. When the paper is unfolded, what does it look like?

A. One hole at the centre of the unfolded square

B. Two holes side by side

C. Four holes

D. Two holes vertically aligned

167. A square paper is folded in half along a vertical centre line, then in half along a horizontal centre line. A hole is punched through all layers at the exact centre of the resulting small square. When the paper is unfolded, what does it look like?

A. One hole at the centre

B. Two holes

C. Three holes

D. Four holes arranged symmetrically around the centre

168. A square paper is folded in half along a vertical centre line. A hole is punched through both layers in the lower-left corner of the folded rectangle. When the paper is unfolded, what does it look like?

A. One hole in lower-left

B. Two holes — one in lower-left and one in lower-right

C. Two holes vertically stacked

D. Four holes

169. A square paper is folded in half along a vertical centre line. A hole is punched through both layers exactly on the fold line, near the bottom. When the paper is unfolded, what does it look like?

A. One hole at the bottom-centre of the unfolded square

B. Two holes at the bottom-left and bottom-right

C. Four holes

D. Two holes near the centre

170. A square paper is folded diagonally from the top-right corner to the bottom-left corner. A hole is punched through both layers near the centre of the resulting triangle. When the paper is unfolded, what does it look like?

A. One hole at the centre

B. Four holes

C. Two holes mirrored across the diagonal

D. Three holes

171. A square paper is folded in half along a vertical centre line. Two holes are punched through both layers — one in the upper-left corner and one in the lower-left corner of the folded rectangle. When the paper is unfolded, what does it look like?

A. Two holes — upper-left and lower-left

B. Four holes — one in each corner

C. Two holes — upper-right and lower-right

D. Two holes — upper-left and upper-right

172. A square paper is folded in half along a horizontal centre line. A hole is punched through both layers near the bottom edge of the folded rectangle, slightly off-centre to the left. When the paper is unfolded, what does it look like?

A. One hole near the bottom

B. Two holes near the centre line

C. Three holes

D. Two holes — one near the top edge (left of centre) and one near the bottom edge (left of centre)

173. A square paper is folded diagonally from the bottom-right corner to the top-left corner. A hole is punched through both layers exactly on the diagonal fold line, in the middle. When the paper is unfolded, what does it look like?

A. One hole at the centre of the unfolded square

B. Two holes mirrored across the diagonal

C. Four holes

D. No holes visible

174. A square paper is folded in half along a horizontal centre line. A hole is punched through both layers in the lower-left corner of the folded rectangle. When the paper is unfolded, what does it look like?

A. One hole in the lower-left

B. Two holes side by side at the bottom

C. Two holes — one in the upper-left corner and one in the lower-left corner

D. Four holes

175. A square paper is folded in half along a vertical centre line. A hole is punched through both layers in the upper-left corner of the folded rectangle. When the paper is unfolded, what does it look like?

A. One hole in the upper-left

B. Two holes — one in upper-left and one in upper-right

C. Two holes stacked vertically

D. Four holes

176. A square paper is folded in half along a vertical centre line. A hole is punched through both layers along the bottom edge of the folded rectangle, slightly inside from the lower-left corner. When the paper is unfolded, what does it look like?

A. One hole near the bottom-left

B. Four holes

C. Two holes along the bottom edge, symmetrically placed left and right of centre

D. Three holes

Practice Exam 2: Answer Key and Full Explanations

Section A — Verbal Analogies (Q1–24)

1. C. Tool relationship — Brush is the tool an artist uses, just as a scalpel is the tool a surgeon uses. The relationship pairs a professional with their primary instrument. Canvas, studio, and painting are art-related but not the artist's working tool.

2. A. Antonym relationship — Stomp is the opposite of tiptoe, just as loud is the opposite of whisper. The pair links a quiet movement or sound with its noisy counterpart. Quiet, shoe, and walk don't form an opposing pair with tiptoe.

3. B. Part-to-whole — A leaf is a visible part of an oak tree, just as a petal is a visible part of a rose. The relationship pairs a small living component with its larger plant. Trunk, forest, and seed don't match the same part-to-whole specificity.

4. D. Body-part-to-species — A fin belongs to a fish, just as a paw belongs to a dog. The pair links a locomotion body part to its species. Ocean is the habitat; scale and tail are other fish features but not the locomotion part.

5. A. Intensity progression — Angry intensifies to enraged, just as tired intensifies to exhausted. Both pairs move from a milder emotion to its extreme form. Happy and calm contradict the negative range; furious matches enraged's intensity.

6. C. Creator-creation — A composer creates a symphony, just as an architect designs a building. The pair links a creator with their primary work. Orchestra, conductor, and musician interact with a symphony but don't create it.

7. B. Young-to-adult species — A joey is a baby kangaroo, just as a gosling is a baby goose. The pair links offspring with adult species. Cub is unrelated, pouch is where joeys live, and Australia is geography.

8. D. Synonym pair — Gigantic is a synonym of enormous, just as fragile is a synonym of delicate. The relationship is direct synonymy. Tiny is the opposite, while tall and wide describe shape rather than size magnitude.

9. A. Craftsperson-material — A tailor shapes fabric, just as a sculptor shapes clay. Both pair a craftsperson with the raw material they transform. Shirt is the product, needle is a tool, and wool is just one type of fabric.

10. D. Collective noun — A swarm is the group name for bees, just as a pride is the group name for lions. The pair links an animal to its collective noun. Honey, flower, and sting relate to bees but are not group names.

11. C. Purpose relationship — An alarm wakes you, just as a lullaby helps you sleep. Both pair a sound with its intended effect. Quiet, clock, and loud describe alarms but not the action they trigger.

12. B. Defining characteristic — Arid (dryness) defines a desert, just as vast defines an ocean. Each pair links an environment to its key trait. Hot and sandy describe deserts partially, but arid captures the defining environmental feature.

13. D. Body-part-to-sense — Sight is the sense linked to the eye, just as hearing is the sense linked to the ear. The pair connects a body part to its primary function. Lens, tear, and blink are eye-related but not the sense.

14. A. Material-to-structure — A wall is built from bricks, just as a statue is sculpted from marble. The pair links a building material to a typical object made from it. Clay, cement, and red relate to bricks but not the structure.

15. B. Season-to-temperature — Hot is the defining temperature of summer, just as cold is the defining temperature of winter. Both pair a season with its weather trait. Sun, vacation, and swim are summer-related but not the temperature itself.

16. C. Operator-to-vehicle — A captain commands a ship, just as a pilot commands an airplane. The pair links an operator with the vehicle they control. Crew, ocean, and uniform are captain-related but not the vessel.

17. D. Day-to-category — Wednesday is a weekday, just as Saturday is part of the weekend. The pair classifies days by category. School, tomorrow, and middle don't categorise days by type.

18. B. Tool-to-action — A broom is used to sweep, just as a shovel is used to dig. The pair links a tool to its primary function. Dust, floor, and handle are broom-related but not the action it performs.

19. A. Animal-to-structure — A bird builds a nest, just as a spider builds a web. The pair links an animal to the home it constructs. Feather, tree, and egg are bird-related but not the constructed home.

20. C. Creator-to-work — A cartographer creates maps, just as an author creates novels. The pair connects a creator with their specialty. Explorer discovers, traveler journeys, and globe displays geography, but only a cartographer creates maps.

21. B. Diminutive action — A glance is a quick look, just as a nibble is a small bite. Both pair a smaller version of an action with its full form. Eye is the body part, blink is involuntary, and notice is the outcome of looking.

22. D. Collective noun — A school is the group name for fish, just as a flock is the group name for sheep. The pair links an animal to its collective noun. Student and learning use "school" in another sense; swimmer is unrelated.

23. A. Container-to-contents — A kettle holds water, just as a pen holds ink. The pair links a container to its typical contents. Tea is brewed using kettle water, but the kettle itself holds water; metal and handle are kettle parts.

24. C. Young-to-adult — A tadpole grows into a frog, just as a sapling grows into a tree. The pair links a young form to its adult version. Pond is the habitat, swim is what tadpoles do, and egg is an earlier stage.

Section B — Sentence Completion (Q25–44)

25. B. Intensity match — Fierce describes a blizzard so intense that visibility collapsed. Mild, brief, and light all contradict the severity described in the sentence.

26. A. Post-marathon state — Drained captures the complete energy depletion that follows running a marathon. Energetic and curious are positive, contradicting collapse; anxious describes worry rather than physical exhaustion.

27. C. Surprising ease — Ease means without difficulty, fitting the unexpected outcome of solving a hard problem effortlessly. Confusion, struggle, and delay all contradict "surprising."

28. D. Standard collocation — Piece is the standard unit for individual items of evidence. Amount and group don't pair naturally with "evidence"; story describes a narrative, not an item.

29. B. Volcanic state — Dormant means inactive but capable of becoming active again, matching a volcano that hasn't erupted for a century. Erupting contradicts "for over a century"; ancient and growing don't describe activity status.

30. C. Determined behaviour — Persisted in matches the determined volunteers continuing their work despite rain. Avoided, cancelled, and forgot about all contradict the word "determined."

31. A. Inaudibility cue — Faint means quiet and barely audible, matching visitors who could not hear from the back of the room. Booming, clear, and cheerful would all be audible at a distance.

32. D. Initial wariness — Timid matches a puppy that is reserved around strangers but warms up once familiar. Fierce, eager, and playful don't describe initial wariness.

33. A. Flavour improvement — Enhance means to improve, matching a chef adding salt to better the flavour. Ruin, cool, and remove don't match the goal of improving taste.

34. B. Safety warning — Hazardous means dangerous, matching authorities advising people to stay home from icy roads. Safe, simple, and familiar would not require such advice.

35. D. Sustained duration — Consecutive means "in a row," fitting a sustained two-day power outage. Happy, brief, and minor don't describe the prolonged nature of the situation.

36. C. Negative discovery — Dismayed means upset or discouraged, matching hikers realising they walked in circles for an hour. Proud, excited, and comforted contradict the negative finding.

37. A. Earned confidence — Confident describes the assurance gained from weeks of studying. Uncertain, anxious, and confused contradict thorough preparation.

38. D. Archaeological finding — Discovered is the standard verb for archaeologists finding long-sought ruins. Built and forgotten contradict the searching context; hidden describes the state, not the act of finding.

39. C. Marketplace noise — Clamour means loud uproar, matching vendors calling and customers haggling in a busy market. Silence, echo, and whisper contradict a bustling, noisy scene.

40. B. Extreme smallness — Tiny matches a kitten small enough to fit inside a teacup. Heavy, fluffy, and playful don't relate to the size required for that comparison.

41. D. Library volume — Low voices keep the library quiet for other readers. Cheerful, clear, and excited would not preserve a peaceful reading environment.

42. A. Sun tracking — Follow describes a sunflower's heliotropism — tracking the sun's path across the sky. Avoid, block, and shadow contradict this natural plant behaviour.

43. D. Simplicity through structure — Wait, the answer is B. Straightforward means simple and direct, matching step-by-step instructions overcoming initial complexity. Impossible, expensive, and seasonal don't fit the cooking context.

Wait, I just used a self-correction phrase. Let me redo this one cleanly:

43. B. Simplicity through structure — Straightforward means simple and direct, matching step-by-step instructions overcoming initial complexity. Impossible, expensive, and seasonal don't fit the cooking context.

44. C. Sophisticated behaviour — Complex matches the intricate social bonds dolphins form and the years required to study them. Random, lonely, and simple contradict sophisticated social behaviour.

Section C — Verbal Classification (Q45–60)

45. D. Precious gemstones — Diamond belongs with ruby, emerald, and sapphire as precious gemstones. Stone is too generic; ring and shiny describe properties, not the category.

46. C. Tree species — Birch belongs with oak, maple, and pine as tree species. Forest is the habitat; branch and leaf are tree parts, not types.

47. A. Wind instruments — Clarinet belongs with saxophone, trumpet, and trombone as wind instruments played by blowing air. Drum is percussion, guitar is stringed, and piano is keyboard.

48. B. Planets — Neptune belongs with Mars, Jupiter, and Venus as planets in our solar system. Moon orbits a planet, star is a sun, and orbit is a path.

49. D. Severe weather — Typhoon belongs with hurricane, tornado, and blizzard as severe weather events. Cloud, wind, and rain are weather components, not events.

50. A. Forms of laughter — Chortle belongs with chuckle, giggle, and snicker as forms of laughter. Cry, sob, and yell are vocal expressions but not laughter.

51. C. Math operations — Subtraction belongs with square root, division, and multiplication as mathematical operations. Equation, number, and answer are math concepts but not operations.

52. B. Major rivers — Yangtze belongs with Mississippi, Amazon, and Nile as major rivers. Lake, ocean, and mountain are different geographical features.

53. A. Planets — Uranus belongs with Mercury, Saturn, and Earth as planets. Comet and asteroid are smaller solar system bodies; galaxy contains many star systems.

54. D. Polygons by side count — Heptagon belongs with pentagon, hexagon, and octagon as polygons named by their side count. Circle has no sides; cube and sphere are 3D shapes.

55. B. Months — August belongs with June, October, and March as months of the year. Winter is a season, season is the category, and holiday is unrelated.

56. C. Synonyms of value — Revere belongs with adore, cherish, and treasure as verbs meaning to hold dear or value highly. Ignore, dislike, and disregard are antonyms.

57. A. Grain-based foods — Oatmeal belongs with pasta, rice, and bread as grain-based staple foods. Carrot is a vegetable, apple is a fruit, and cheese is dairy.

58. C. Body muscles — Hamstring belongs with biceps, quadriceps, and triceps as named muscles of the body. Bone, tendon, and nerve are different anatomical structures.

59. D. Romance languages — Portuguese belongs with French, Spanish, and Italian as Romance languages descended from Latin. Europe is the continent; country and flag are unrelated.

60. B. Footwear types — Loafer belongs with sneaker, sandal, and boot as types of footwear. Sock is hosiery; lace and heel are shoe parts, not types.

Section D — Number Analogies (Q61–78)

61. A. Rule: add 4 — 2+4=6, 5+4=9, so 10+4=14. The same constant is added to each first number to get the second.

62. C. Rule: divide by 2 — 8÷2=4, 14÷2=7, so 20÷2=10. Each second number is half the first.

63. D. Rule: square the first — $3^2=9$, $4^2=16$, so $5^2=25$. The second number is the first multiplied by itself.

64. B. Rule: divide by 3 — 12÷3=4, 15÷3=5, so 21÷3=7. Each second number is one-third the first.

65. A. Rule: multiply by 3 — 1×3=3, 4×3=12, so 7×3=21. The second number is triple the first.

66. D. Rule: subtract 5 — 20−5=15, 18−5=13, so 12−5=7. Five is subtracted from the first to get the second.

67. B. Rule: square the first — $2^2=4$, $5^2=25$, so $3^2=9$. The second number is the first multiplied by itself.

68. C. Rule: multiply by 5 — 6×5=30, 8×5=40, so 10×5=50. Each second number is five times the first.

69. D. Rule: square root — $\sqrt{25}=5$, $\sqrt{36}=6$, so $\sqrt{49}=7$. Each second number is the square root of the first.

70. A. Rule: multiply by 2 — 4×2=8, 7×2=14, so 9×2=18. Each second number is double the first.

71. C. Rule: subtract 4 — 15−4=11, 22−4=18, so 30−4=26. Four is subtracted from the first to get the second.

72. B. Rule: multiply by 4 — 3×4=12, 4×4=16, so 6×4=24. Each second number is four times the first.

73. A. Rule: square root — √36=6, √49=7, so √64=8. Each second number is the square root of the first.

74. D. Rule: multiply by 2, add 3 — 5×2+3=13, 8×2+3=19, so 10×2+3=23. The same two-step operation applies to all pairs.

75. C. Rule: divide by 8 — 40÷8=5, 32÷8=4, so 24÷8=3. Each second number is one-eighth the first.

76. B. Rule: multiply by 5 — 2×5=10, 3×5=15, so 4×5=20. Each second number is five times the first.

77. D. Rule: subtract 5 — 9−5=4, 14−5=9, so 20−5=15. Five is subtracted from the first to get the second.

78. A. Rule: multiply by 3 — 7×3=21, 5×3=15, so 8×3=24. Each second number is triple the first.

Section E — Number Series (Q79–96)

79. B. Rule: add 4 — Sequence rises by 4 each step (4, 8, 12, 16), so the next term is 16+4=20.

80. D. Rule: differences +1 each step — Add 1, 2, 3, 4, 5. From 11, add 5 to get 16. The gaps grow by one each step.

81. A. Rule: subtract 9 — Sequence drops by 9 each step (100, 91, 82, 73), so the next term is 73−9=64.

82. C. Rule: triangular numbers — Differences add 2, 3, 4, 5, 6. From 15, add 6 to get 21. Each step adds a larger increment.

83. B. Rule: triple — Sequence triples each step (2, 6, 18, 54), so 54×3=162. A geometric progression.

84. A. Rule: subtract 7 — Sequence drops by 7 each step (45, 38, 31, 24), so 24−7=17. A constant decrease.

85. D. Rule: multiply by 2, add 1 — Each step doubles and adds 1. From 47, calculate 47×2+1=95. The growth is rapid.

86. C. Rule: divide by 2 — Sequence halves each step (128, 64, 32, 16), so 16÷2=8. A geometric decrease.

87. D. Rule: differences double — Add 4, 6, 8, 10. From 25, add 10 to get 35. The gaps grow each step.

88. B. Rule: perfect cubes — Sequence is 1^3, 2^3, 3^3, 4^3, so the next term is $5^3=125$. Each term is a number cubed.

89. A. Rule: subtractions grow — Subtract 5, 10, 15, 20. From 70, subtract 20 to get 50. The amounts dropped grow each step.

90. C. Rule: differences +2 each step — Add 4, 6, 8, 10, 12. From 30, add 12 to get 42. The gaps expand consistently.

91. D. Rule: multiply by 2, subtract 1 — Each step doubles and subtracts 1. From 33, calculate $33\times2-1=65$.

92. A. Rule: divide by 3 — Sequence shrinks by ÷3 each step (81, 27, 9, 3), so 3÷3=1. A geometric decrease.

93. B. Rule: multiply by 2, add 1 — Each step doubles and adds 1. From 39, calculate $39\times2+1=79$.

94. C. Rule: differences +1 each step — Add 1, 2, 3, 4, 5, 6. From 16, add 6 to get 22. Each gap is one more than the previous.

95. A. Rule: divide by 2 — Sequence halves each step (144, 72, 36, 18), so 18÷2=9. A geometric decrease.

96. D. Rule: triple — Sequence triples each step (5, 15, 45, 135), so $135\times3=405$. A geometric progression.

Section F — Number Puzzles (Q97–114)

97. C. Reverse multiplication — Since $?\times7=56$, the missing number is 56÷7=8. The unknown factor is found by dividing the product by the known factor.

98. B. Reverse division — Since $45\div?=9$, the missing divisor is 45÷9=5. The unknown divisor is found by dividing the dividend by the quotient.

99. A. Substitution — Replace ☆ with 6, giving 6+6+4=16. Sum the known values to find the result.

100. D. Two-step — Right side equals $8\times3=24$. Then $?-12=24$ means $?=24+12=36$. Add the subtracted amount back to balance.

101. B. Reverse multiplication — Since △×4=28, the symbol equals 28÷4=7. The unknown factor is found by reversing the multiplication.

102. C. Two-step — Right side equals 9×4=36. Then 15+?=36 means ?=36−15=21. Subtract the known number from the total.

103. A. Substitution with order of operations — Replace ◇=5 and ○=8, giving 5×8−10=40−10=30. Multiplication is applied before subtraction.

104. D. Reverse division — Since 72÷?=9, the missing divisor is 72÷9=8. The unknown divisor is found by reversing the division.

105. B. Two-step substitution — From △+9=17, △=8. Then △×5=8×5=40. Solve for the symbol first, then complete the second operation.

106. D. Equal-value puzzle — Since ?+?=18, two identical missing numbers must equal 18, so each is 18÷2=9. Each unknown is half the total.

107. C. Substitution with order of operations — Replace ◇ with 4, giving 4×3+5=12+5=17. Multiplication is applied before addition.

108. A. Two-step — Right side equals 35+4=39. Then 60−?=39 means ?=60−39=21. Subtract to isolate the missing value.

109. D. Reverse multiplication — From △×○=24 and △=6, the other symbol equals 24÷6=4. Use the known factor to find the unknown.

110. B. Multi-step — From 9×?+7=70, subtract 7 to get 9×?=63. Then ?=63÷9=7. Reverse the steps in order.

111. C. Two-step — Right side equals 50÷2=25. Then ?−14=25 means ?=25+14=39. Add the subtracted amount back to balance.

112. A. Substitution with order of operations — Replace ☆ with 9, giving 9×2−7=18−7=11. Multiplication is applied before subtraction.

113. B. Two-step — Right side equals 36+4=40. Then 4×?=40 means ?=40÷4=10. Divide both sides by 4 to find the missing factor.

114. C. Substitution — From △+○=20 and △=12, the other symbol equals 20−12=8. Use the known value to isolate the unknown.

Section G — Figure Matrices (Q115–136)

115. D. Rule: internal line count rises 1, 2, 3 per row — Bottom row of circles goes 1 line, 2 lines, then 3 lines. The missing cell completes the progression with three internal lines.

116. B. Rule: 45° clockwise rotation per cell — Bottom row goes down arrow, down-left arrow, then continues clockwise to left. The rotation pattern produces an arrow pointing left.

117. C. Rule: odd-numbered dot count 1, 3, 5 per row — Bottom row of circles goes 1 dot, 3 dots, then 5 dots. The odd-number progression holds across all three rows.

118. A. Rule: inner element cycles circle, square, triangle per row — Bottom row of octagons goes circle, square, then triangle. The cycle completes consistently across all rows.

119. B. Rule: element count decreases by 1 per cell — Bottom row of circles goes 3, 2, then 1. The drop of one per cell continues into the missing cell.

120. D. Rule: shaded half rotates clockwise — Bottom row's triangle shading goes left side, top portion, then right side. The clockwise rotation continues into the final cell.

121. C. Rule: arrow count increases by 1 per cell — Bottom row goes 3 arrows, 4 arrows, then 5 arrows. The progression matches the rows above.

122. A. Rule: shading transitions solid → half → outlined — Bottom row's diamonds go solid black, half-shaded, then outlined only. The progression completes the row.

123. D. Rule: size increases top to bottom in each column — Column 3 of stars goes medium, large, then extra-large. The column's size progression continues downward.

124. B. Rule: alternating W-B-W (or B-W-B) per row — Bottom row of triangles starts white, alternates to black, then returns to white. The alternation pattern matches.

125. A. Rule: side count increases by 1 per cell — Bottom row goes pentagon (5), hexagon (6), then heptagon (7). Each step adds one side.

126. C. Rule: shading progresses outlined → half-shaded → fully black — Bottom row's triangles complete the row with a fully black triangle. The progression matches the rows above.

127. B. Rule: element count increases by 1 per cell — Bottom row of stars goes 3, 4, then 5. Each cell adds one star.

128. D. Rule: letter rotates 90° clockwise per cell — Bottom row's T goes upright, 90° clockwise, then 180°. The rotation continues across the row.

129. A. Rule: columns share dot count, rows share shape — Missing bottom-right cell is a triangle in column 3, so it has 3 dots. Both column constraint and row constraint meet.

130. C. Rule: shading progresses outlined → striped → solid black — Bottom row's diamonds finish with a solid black diamond. The progression matches the rows above.

131. D. Rule: arrows rotate 90° counterclockwise per cell — Bottom row goes down, right, then up. The continuous rotation finishes with up.

132. B. Rule: outline thickness increases thin → medium → thick — Bottom row's stars complete with a thick-outlined star. The thickness progression matches the rows above.

133. C. Rule: shape count increases by 1 per cell — Bottom row of triangles goes 4, 5, then 6. Each cell adds one triangle.

134. A. Rule: size increases small → medium → large per row — Bottom row of crescent moons completes with a large moon. The size progression continues across the row.

135. B. Rule: stripe count increases 1, 2, 3 per cell — Bottom row's triangles finish with 3 stripes. The stripe progression matches the rows above.

136. D. Rule: side count and dot count both increase by 1 per cell — Bottom row goes pentagon/3 dots, hexagon/4 dots, then heptagon/5 dots. Both attributes advance together.

Section H — Figure Classification (Q137–158)

137. A. Shared attribute: vertical stripe fill — All three given shapes are filled with vertical stripes. The pentagon with vertical stripes matches the defining fill pattern.

138. D. Shared attribute: fully shaded — All three given shapes are solid black throughout. The fully shaded diamond matches the complete shading attribute.

139. B. Shared attribute: single small dot inside — All three given shapes contain exactly one small dot. The hexagon with one small dot inside matches the pattern.

140. C. Shared attribute: solid black arrow in some direction — All three given are solid black arrows pointing in different directions. The black arrow pointing left maintains both colour and form.

141. A. Shared attributes: small + outlined (white) — All three given are small outlined shapes with no fill. The small white pentagon matches both size and unfilled outline.

142. C. Shared attribute: divided into 4 equal sections — All three given are split into four equal parts. The rectangle divided into 4 equal parts matches the division attribute.

143. D. Shared attribute: contains one curved internal line — All three given shapes have a single curved line inside. The pentagon with a curved line maintains the curved-line attribute.

144. B. Shared attribute: contains one diagonal line — All three given shapes have exactly one diagonal line drawn inside. The hexagon with one diagonal line matches the pattern.

145. C. Shared attribute: equilateral triangle — All three given are equilateral triangles in different orientations. The equilateral triangle pointing left maintains the same shape with a new rotation.

146. A. Shared attribute: top half or top portion shaded — All three given shapes have their upper region shaded black. The pentagon with the top portion black matches the shading position.

147. B. Shared attribute: 4 evenly-spaced dots inside — All three given shapes contain four evenly-distributed dots. The hexagon with 4 evenly-spaced dots maintains both count and arrangement.

148. D. Shared attributes: small + solid black + curves/points — All three given are small fully-black non-polygonal shapes. The small black sun matches small size, solid fill, and non-polygonal form.

149. A. Shared attribute: top-right corner clipped off — All three given shapes have the same corner removed. The pentagon with the top-right corner cut off matches the cut position.

150. C. Shared attribute: outlined shape with centred dot — All three given are outlined shapes with a small filled circle in the centre. The outlined pentagon with a centred dot maintains the attribute.

151. B. Shared attribute: multi-leaf clover — All three given are clovers with increasing leaf counts (3, 4, 5). The 6-leaf clover continues the pattern.

152. D. Shared attribute: outer polygon containing smaller circle — All three given are outlined polygons with a smaller circle inside. The hexagon containing a smaller circle matches the nested-circle attribute.

153. A. Shared attribute: rounded corners — All three given shapes have softened vertices. The pentagon with rounded corners matches the softened-corner attribute.

154. C. Shared attribute: two identical shapes overlapping — All three given show two of the same shape with partial intersection. Two pentagons overlapping matches this pairing attribute.

155. D. Shared attribute: divided in half by a vertical line — All three given shapes are split into two equal halves vertically. The pentagon split vertically matches the division attribute.

156. B. Shared attribute: outer shape contains a star — All three given are outlined shapes with a star inside. The pentagon with a star inside maintains the nested-star attribute.

157. A. Shared attribute: small triangle on top — All three given shapes have a small triangle resting on top. The pentagon with a triangle stacked on top matches the position attribute.

158. C. Shared attribute: polygon with one side coloured grey — All three given polygons have exactly one side highlighted in grey. The hexagon with one side grey maintains this single-side-grey attribute.

Section I — Paper Folding (Q159–176)

159. B. One horizontal fold creates 2 layers — A hole in the lower-right corner of the folded rectangle is not on the fold; it mirrors vertically, producing 2 holes — one in the upper-right and one in the lower-right of the unfolded square.

160. D. Two perpendicular folds create 4 layers — A corner hole punches through all four layers, producing 4 holes — one in each corner of the unfolded square.

161. C. One diagonal fold creates 2 layers — The centre hole mirrors across the diagonal fold line, producing 2 holes symmetrically placed about the diagonal.

162. A. One vertical fold, hole off the fold line — The exact centre of the folded rectangle is not on the fold; it mirrors horizontally to produce 2 holes side by side at the horizontal middle.

163. D. Two perpendicular folds create 4 layers — A corner hole punches through all four layers, producing 4 holes — one in each corner of the unfolded square.

164. B. One vertical fold, hole near top edge — A hole near the top edge (not on the fold) mirrors horizontally, producing 2 holes near the top of the unfolded square, symmetrically placed about the vertical centre.

165. C. One diagonal fold, hole near top edge — A hole near the top edge of the triangle mirrors across the diagonal fold, producing 2 holes symmetrically placed about the diagonal.

166. A. Hole on fold line stays single — A hole punched directly on the fold line does not duplicate because both layers share the same point. The result is a single hole at the centre of the unfolded square.

167. D. Two perpendicular folds, centred hole — The hole at the exact centre of the small folded square punches through all four layers, producing 4 holes arranged symmetrically around the centre.

168. B. One vertical fold, corner off the fold — The lower-left corner of the folded rectangle is not on the fold; it mirrors horizontally, producing 2 holes — one in the lower-left and one in the lower-right of the unfolded square.

169. A. Hole on fold line stays single — A hole punched directly on the vertical fold line near the bottom does not duplicate. The result is a single hole at the bottom-centre of the unfolded square.

170. C. One diagonal fold, central hole — A hole near the centre of the triangle mirrors across the diagonal fold, producing 2 holes symmetrically placed about the diagonal.

171. B. One vertical fold, two corner holes — Each of the two punched holes (upper-left and lower-left) mirrors across the fold, producing 4 total holes — one in each corner of the unfolded square.

172. D. One horizontal fold, hole off-centre near bottom — A hole near the bottom edge, slightly left of centre, mirrors vertically. The result is 2 holes — one near the top edge (left of centre) and one near the bottom edge (left of centre).

173. A. Hole on diagonal fold line stays single — A hole punched directly on the diagonal fold does not duplicate. Both layers share the same point, leaving one hole at the centre of the unfolded square.

174. C. One horizontal fold, corner off the fold — The lower-left corner of the folded rectangle is not on the fold; it mirrors vertically, producing 2 holes — one in the upper-left and one in the lower-left of the unfolded square.

175. B. One vertical fold, corner off the fold — The upper-left corner of the folded rectangle is not on the fold; it mirrors horizontally, producing 2 holes — one in the upper-left and one in the upper-right of the unfolded square.

176. C. One vertical fold, hole along bottom edge near corner — A hole along the bottom edge, slightly inside from the lower-left corner, mirrors horizontally. The result is 2 holes along the bottom edge, symmetrically placed left and right of the vertical centre line.