

PRACTICE EXAM 6: CCAT-7 LEVEL 10 SIMULATION (176 QUESTIONS)

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

Section A — Verbal Analogies (Questions 1–24)

1. Scientist is to laboratory as _____ is to studio

- A. canvas
- B. painting
- C. artist
- D. brush

2. Drought is to rainfall as famine is to _____

- A. hunger
- B. starvation
- C. plenty
- D. harvest

3. Physicist is to matter as linguist is to _____

- A. language
- B. word
- C. speech
- D. book

4. Compose is to song as choreograph is to _____

- A. music
- B. dance
- C. stage
- D. perform

5. Thirst is to water as hunger is to _____

- A. food
- B. eat
- C. plate
- D. cook

6. Fin is to fish as _____ is to bird

- A. claw
- B. beak
- C. wing
- D. feather

7. Lava is to volcano as ice is to _____

- A. winter
- B. glacier
- C. cold
- D. snow

8. Abundant is to scarce as lenient is to _____

- A. soft
- B. mild
- C. easy
- D. strict

9. Linguist is to words as ornithologist is to _____

- A. animals
- B. flying
- C. birds
- D. sky

10. Plot is to novel as melody is to _____

- A. song
- B. tune
- C. music
- D. notes

11. Marathoner is to endurance as sprinter is to _____

- A. distance
- B. medal
- C. running
- D. speed

12. Shipwright is to ships as cartographer is to _____

- A. countries
- B. maps
- C. travel
- D. geography

13. Encyclopedia is to facts as anthology is to _____

- A. authors
- B. books
- C. stories
- D. words

14. Famished is to hungry as parched is to _____

- A. wet
- B. cold
- C. drink
- D. thirsty

15. Scribble is to write as mumble is to _____

- A. speak
- B. whisper
- C. say
- D. talk

16. Fragment is to whole as ____ is to paragraph

- A. word
- B. sentence
- C. text
- D. essay

17. Cumulus is to cloud as oak is to ____

- A. wood
- B. forest
- C. acorn
- D. tree

18. Thoroughbred is to horse as dachshund is to ____

- A. small
- B. pet
- C. dog
- D. brown

19. Soliloquy is to play as aria is to ____

- A. instrument
- B. opera
- C. song
- D. voice

20. Novice is to expert as pawn is to _____

- A. queen
- B. board
- C. game
- D. piece

21. Diminish is to reduce as amplify is to _____

- A. add
- B. grow
- C. extend
- D. increase

22. Kennel is to dog as aviary is to _____

- A. cage
- B. bird
- C. zoo
- D. fly

23. Rusty is to metal as stale is to _____

- A. bread
- B. old
- C. flavour
- D. fresh

24. Constellation is to stars as archipelago is to ____

- A. continents
- B. ocean
- C. islands
- D. boats

Section B — Sentence Completion (Questions 25–44)

25. The scientist's research uncovered an ____ of evidence supporting her hypothesis, making the case undeniable.

- A. shortage
- B. abundance
- C. lack
- D. small amount

26. The young chess player's ____ approach to each match earned her a national championship before her fifteenth birthday.

- A. careless
- B. casual
- C. weak
- D. tenacious

27. The lifeguard remained ____ throughout her shift, scanning the swimmers and beach for any signs of trouble.

- A. vigilant

- B. relaxed
- C. distracted
- D. drowsy

28. The dark clouds and falling barometric pressure suggested that a storm was ____.

- A. unlikely
- B. distant
- C. imminent
- D. mild

29. The professor praised the student's ____ research, which had taken months of careful study to complete.

- A. diligent
- B. lazy
- C. brief
- D. casual

30. Translating the ____ inscription required years of specialised study and consultation with expert linguists.

- A. clear
- B. obscure
- C. obvious
- D. easy

31. The young environmentalist was an ____ supporter of conservation efforts, dedicating every weekend to volunteering at the wildlife sanctuary.

- A. casual
- B. occasional
- C. reluctant
- D. ardent

32. The economist studied the ____ stock prices to detect patterns that might predict future market behaviour.

- A. stable
- B. steady
- C. fluctuating
- D. constant

33. The ____ silence in the haunted house made even the most courageous explorer feel uneasy.

- A. peaceful
- B. ominous
- C. comfortable
- D. welcoming

34. Maria was ____ when she received the news that her painting had been accepted into the prestigious national gallery.

- A. elated
- B. disappointed
- C. confused
- D. annoyed

35. The artist's ____ paintings used colours and shapes to convey emotions rather than depicting recognisable objects.

- A. realistic
- B. detailed
- C. portrait
- D. abstract

36. The interviewer appreciated the celebrity's ____ answers, which revealed personal details rarely shared with the public.

- A. evasive
- B. dishonest
- C. candid
- D. brief

37. The scientist's ____ approach to the problem combined techniques from fields that had never been used together before.

- A. novel
- B. routine
- C. tired
- D. ordinary

38. The hiker became ____ of the strange noises coming from behind the bushes and quietly retreated to safer ground.

- A. excited
- B. eager
- C. friendly

D. wary

39. Despite her enormous wealth, the philanthropist lived a ____ life, donating most of her income to charity.

A. lavish

B. frugal

C. extravagant

D. luxurious

40. The crew's journey across the ____ ocean tested both their navigation skills and their courage.

A. calm

B. peaceful

C. perilous

D. shallow

41. The civil rights leader remained ____ in his commitment to non-violent protest, even when faced with overwhelming opposition.

A. uncertain

B. wavering

C. confused

D. resolute

42. Tournament judges would ____ each routine for any small mistakes that could affect the gymnast's final score.

A. scrutinise

- B. ignore
- C. skip
- D. overlook

43. The witness's ____ statement left investigators unsure of what had actually happened that night.

- A. clear
- B. ambiguous
- C. direct
- D. precise

44. The ____ scholar had been studying ancient civilisations for over fifty years and had published numerous influential books.

- A. young
- B. amateur
- C. venerable
- D. inexperienced

Section C — Verbal Classification (Questions 45–60)

45. Mercury, Venus, Earth — which planet belongs with these?

- A. Jupiter
- B. Saturn
- C. Uranus
- D. Mars

46. Picasso, Monet, Dalí — which name belongs with these?

- A. Beethoven
- B. Rembrandt
- C. Shakespeare
- D. Edison

47. Almond, walnut, pecan — which word belongs with these?

- A. cashew
- B. apple
- C. potato
- D. carrot

48. Violin, viola, cello — which instrument belongs with these?

- A. flute
- B. trumpet
- C. double bass
- D. drum

49. Blizzard, hurricane, typhoon — which word belongs with these?

- A. rainbow
- B. sunshine
- C. cloud
- D. tornado

50. Plato, Socrates, Aristotle — which name belongs with these?

- A. Pythagoras
- B. Da Vinci
- C. Shakespeare
- D. Einstein

51. Vesuvius, Etna, Krakatoa — which mountain belongs with these?

- A. Mount Everest
- B. Mount Fuji
- C. Mount Logan
- D. Mount Kilimanjaro

52. Beijing, Tokyo, Seoul — which capital city belongs with these?

- A. Paris
- B. Cairo
- C. Bangkok
- D. Sydney

53. Frog, salamander, newt — which animal belongs with these?

- A. toad
- B. snake
- C. lizard
- D. turtle

54. Scalpel, forceps, thermometer — which tool belongs with these?

- A. wrench
- B. saw
- C. screwdriver
- D. stethoscope

55. Oratorio, symphony, concerto — which musical work belongs with these?

- A. song
- B. opera
- C. melody
- D. tune

56. Sahara, Gobi, Kalahari — which desert belongs with these?

- A. Amazon
- B. Alps
- C. Atacama
- D. Atlantic

57. Saxophone, oboe, clarinet — which word belongs with these?

- A. flute
- B. trumpet
- C. drum
- D. piano

58. Dolphin, manatee, whale — which animal belongs with these?

- A. shark
- B. tuna
- C. octopus
- D. walrus

59. Summit, peak, crest — which word belongs with these?

- A. valley
- B. base
- C. apex
- D. bottom

60. Sphere, cube, cylinder — which 3D shape belongs with these?

- A. circle
- B. cone
- C. square
- D. triangle

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

Section D — Number Analogies (Questions 61–78)

61. (6, 30) is related to (8, 40). What number completes (10,)?

- A. 40
- B. 45

- C. 48
- D. 50

62. (96, 8) is related to (84, 7). What number completes (60, ?)?

- A. 5
- B. 6
- C. 7
- D. 8

63. (5, 16) is related to (8, 25). What number completes (11, ?)?

- A. 28
- B. 30
- C. 34
- D. 36

64. (3, 12) is related to (5, 30). What number completes (7, ?)?

- A. 50
- B. 56
- C. 60
- D. 64

65. (24, 6) is related to (40, 10). What number completes (60, ?)?

- A. 12
- B. 13

- C. 14
- D. 15

66. (4, 13) is related to (6, 19). What number completes (9, ?)?

- A. 28
- B. 30
- C. 32
- D. 34

67. (49, 7) is related to (64, 8). What number completes (81, ?)?

- A. 8
- B. 9
- C. 10
- D. 11

68. (3, 36) is related to (4, 48). What number completes (5, ?)?

- A. 50
- B. 55
- C. 58
- D. 60

69. (100, 4) is related to (75, 3). What number completes (125, ?)?

- A. 3
- B. 4

C. 5

D. 6

70. (8, 17) is related to (12, 25). What number completes (15, ?)?

A. 31

B. 33

C. 35

D. 37

71. (6, 36) is related to (9, 81). What number completes (11, ?)?

A. 110

B. 115

C. 118

D. 121

72. (84, 12) is related to (56, 8). What number completes (35, ?)?

A. 4

B. 5

C. 6

D. 7

73. (3, 24) is related to (5, 40). What number completes (7, ?)?

A. 56

B. 60

- C. 64
- D. 70

74. (12, 5) is related to (16, 7). What number completes (20,)?

- A. 6
- B. 7
- C. 8
- D. 9

75. (3, 9) is related to (4, 16). What number completes (6,)?

- A. 25
- B. 30
- C. 36
- D. 42

76. (15, 3) is related to (35, 7). What number completes (50,)?

- A. 10
- B. 11
- C. 12
- D. 13

77. (3, 11) is related to (5, 19). What number completes (8,)?

- A. 29
- B. 31

- C. 33
- D. 35

78. (1, 2) is related to (2, 6). What number completes (3, ?)?

- A. 8
- B. 10
- C. 12
- D. 15

Section E — Number Series (Questions 79–96)

79. 4, 9, 16, 25, 36, ?

- A. 42
- B. 49
- C. 50
- D. 56

80. 3, 7, 15, 31, 63, ?

- A. 127
- B. 125
- C. 121
- D. 119

81. 2, 5, 11, 23, 47, ?

A. 89

B. 91

C. 95

D. 99

82. 100, 95, 85, 70, 50, ?

A. 35

B. 30

C. 28

D. 25

83. 5, 11, 19, 29, 41, ?

A. 55

B. 53

C. 51

D. 49

84. 1, 8, 27, 64, 125, ?

A. 196

B. 216

C. 256

D. 343

85. 2, 3, 5, 9, 17, 33, ?

- A. 49
- B. 55
- C. 61
- D. 65

86. 1, 3, 6, 10, 15, 21, ?

- A. 25
- B. 26
- C. 28
- D. 30

87. 729, 243, 81, 27, ?

- A. 7
- B. 9
- C. 11
- D. 12

88. 2, 6, 14, 30, 62, ?

- A. 126
- B. 122
- C. 118
- D. 130

89. 1, 4, 10, 22, 46, ?

- A. 88
- B. 90
- C. 92
- D. 94

90. 4, 12, 24, 40, 60, ?

- A. 76
- B. 80
- C. 84
- D. 88

91. 200, 100, 50, 25, 12.5, ?

- A. 6
- B. 6.25
- C. 7
- D. 7.5

92. 13, 26, 39, 52, 65, ?

- A. 70
- B. 72
- C. 75
- D. 78

93. 3, 6, 12, 24, 48, ?

- A. 96
- B. 100
- C. 108
- D. 112

94. 9, 16, 25, 36, 49, ?

- A. 56
- B. 60
- C. 64
- D. 72

95. 7, 14, 21, 28, 35, ?

- A. 40
- B. 42
- C. 44
- D. 45

96. 1, 5, 12, 22, 35, 51, ?

- A. 66
- B. 68
- C. 70
- D. 72

Section F — Number Puzzles (Questions 97–114)

97. $9 \times 6 + 7 = ?$

- A. 61
- B. 63
- C. 65
- D. 67

98. If $\diamond \times 11 = 99$, what is $\diamond + 14$?

- A. 21
- B. 23
- C. 25
- D. 27

99. $180 \div 12 = ?$

- A. 12
- B. 13
- C. 14
- D. 15

100. If $\Delta = 8$ and $\circ = 6$, what is $\Delta^2 - \circ^2$?

- A. 22
- B. 24
- C. 28

D. 32

101. $5 \times 5 + 5 \times 5 = ?$

A. 45

B. 50

C. 55

D. 60

102. If $\star \times 6 = 72$, what is \star^2 ?

A. 144

B. 156

C. 169

D. 196

103. $100 - (4 \times 9) = ?$

A. 56

B. 58

C. 60

D. 64

104. If $\diamond = 5$, what is $\diamond^3 - 25$?

A. 80

B. 90

C. 100

D. 110

105. $7 + 6 \times 8 = ?$

A. 49

B. 51

C. 53

D. 55

106. $84 \div 7 + 5 = ?$

A. 17

B. 19

C. 21

D. 23

107. If $\Delta \times 8 = 96$, what is $\Delta \times 5$?

A. 55

B. 60

C. 65

D. 70

108. $15 \times 8 \div 4 = ?$

A. 25

B. 28

C. 30

D. 35

109. $6^2 + 8^2 = ?$

A. 96

B. 100

C. 104

D. 112

110. If $\star + 17 = 25$, what is \star^2 ?

A. 64

B. 72

C. 81

D. 100

111. $200 \div 8 + 4 = ?$

A. 23

B. 25

C. 27

D. 29

112. $9 \times 4 - 6 \times 3 = ?$

A. 14

B. 16

C. 18

D. 20

113. If $\diamond \times \diamond = 169$, what is $\diamond + 10$?

A. 21

B. 23

C. 25

D. 27

114. $17 \times 5 - 35 = ?$

A. 40

B. 45

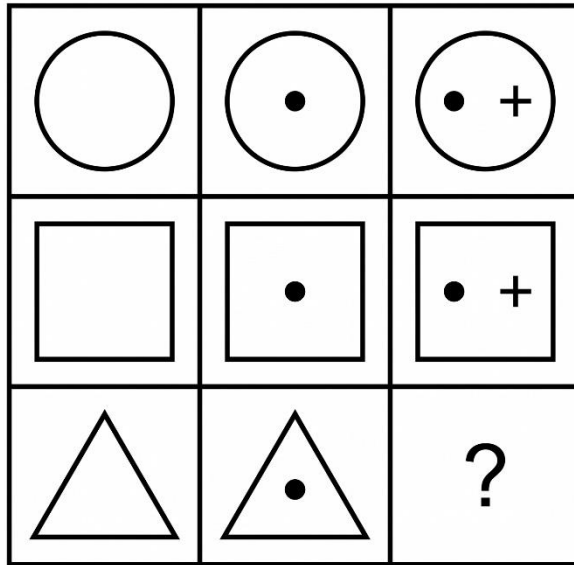
C. 50

D. 55

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

Section G — Figure Matrices (Questions 115–136)

115. Which figure completes the 3×3 grid?



- A. triangle alone
- B. triangle with 1 dot only
- C. triangle with 2 crosses
- D. triangle with 1 inner dot plus 1 inner cross






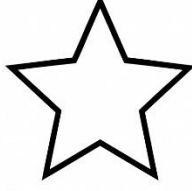

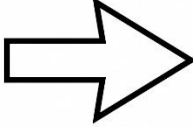
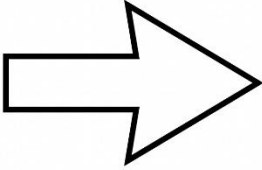
116. Which figure completes the 3×3 grid?

Figure PQ-2

F	⌒	⌑
G	⌚	⌛
P	?	Ⓟ

- A. P upright
- B. P rotated 90° clockwise
- C. P mirrored horizontally
- D. P rotated 270° clockwise

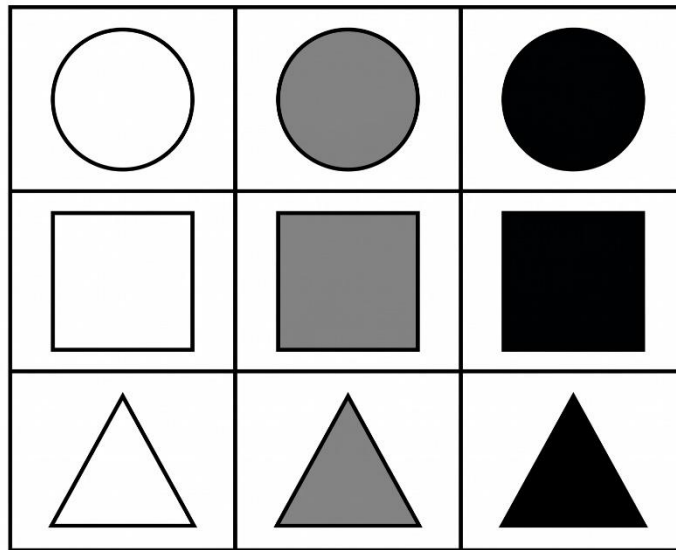
117. Which figure completes the 3×3 grid?

- A. small arrow
- B. tiny arrow
- C. medium arrow
- D. large arrow

118. Which figure completes the 3×3 grid?

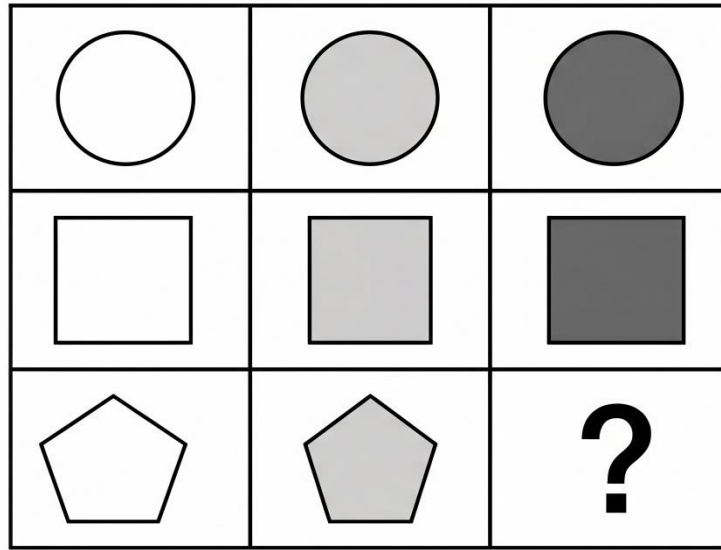
Figure PQ-4:



- A. white triangle
- B. grey triangle
- C. black triangle
- D. striped triangle

119. Which figure completes the 3×3 grid?

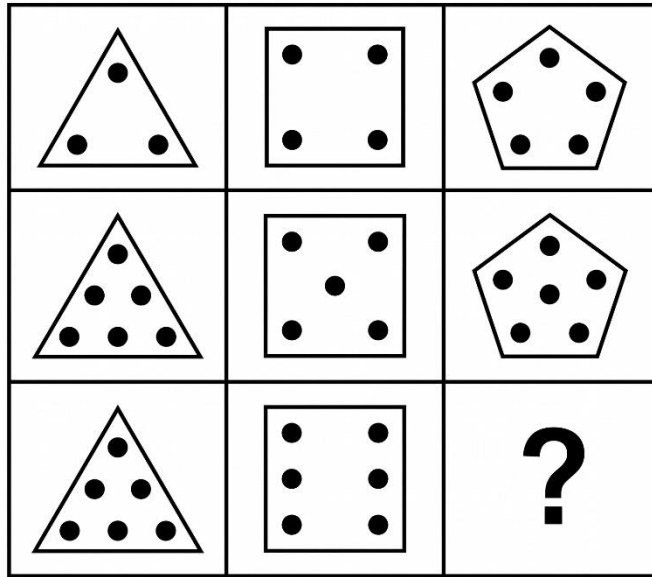
Figure PQ-5



- A. pentagon upside down
- B. pentagon mirrored
- C. pentagon rotated 270° clockwise
- D. pentagon rotated 90° clockwise

120. Which figure completes the 3×3 grid?

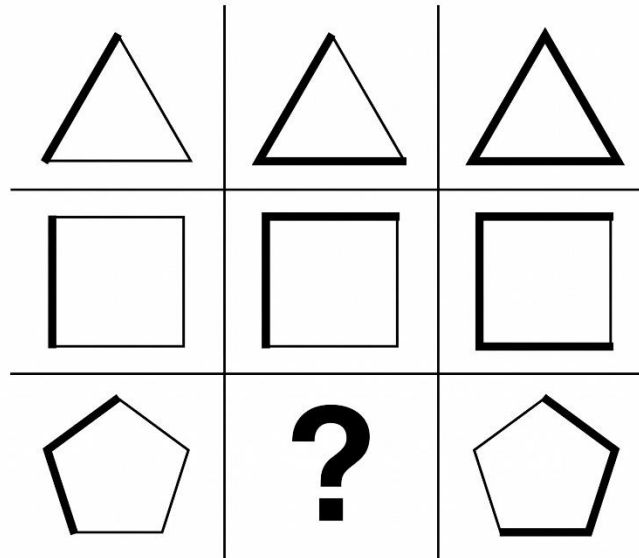
Figure PQ-6



- A. pentagon with 6 dots
- B. pentagon with 5 dots
- C. pentagon with 7 dots
- D. hexagon with 6 dots

121. Which figure completes the 3×3 grid?

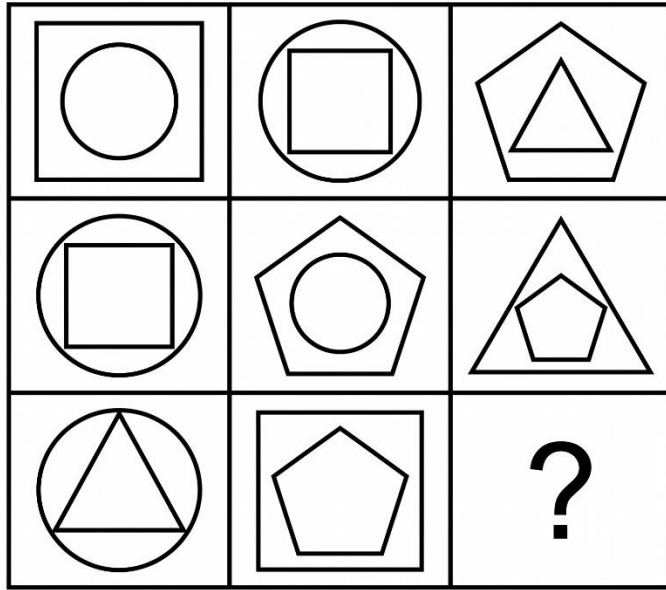
[Figure PQ-7: Clean black-line 3×3 grid on white background.]



- A. pentagon with 1 bold side
- B. pentagon with 2 bold sides
- C. pentagon with all sides bold
- D. pentagon with no bold sides

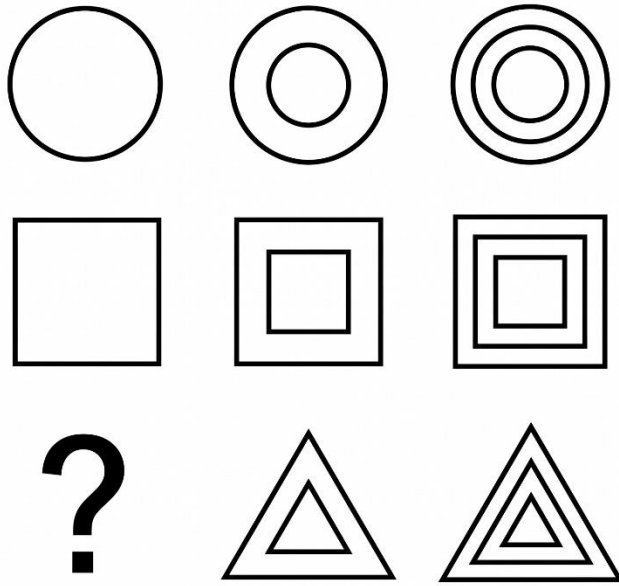
122. Which figure completes the 3×3 grid?

Figure PQ-8



- A. circle inside square
- B. circle inside pentagon
- C. circle inside triangle
- D. triangle inside square










123. Which figure completes the 3×3 grid?



- A. 1 triangle
- B. 2 concentric triangles
- C. 4 concentric triangles
- D. 1 hexagon

124. Which figure completes the 3x3 grid?

Figure PQ-10

- A. pentagon with 13
- B. pentagon with 14
- C. pentagon with 16
- D. pentagon with 15

125. Which figure completes the 3×3 grid?

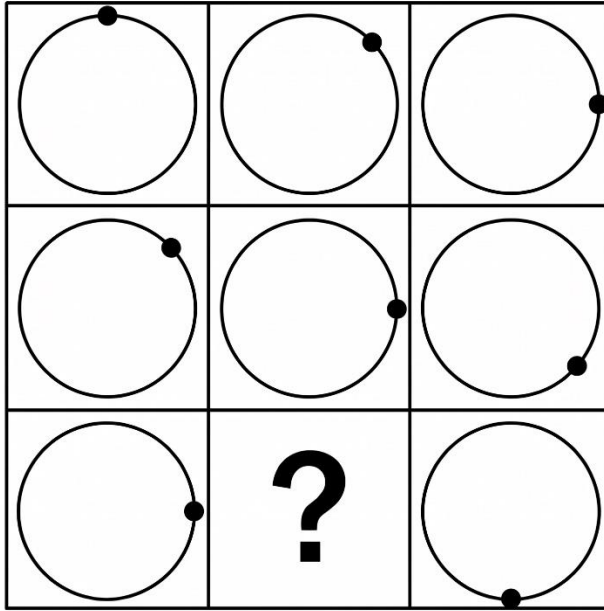
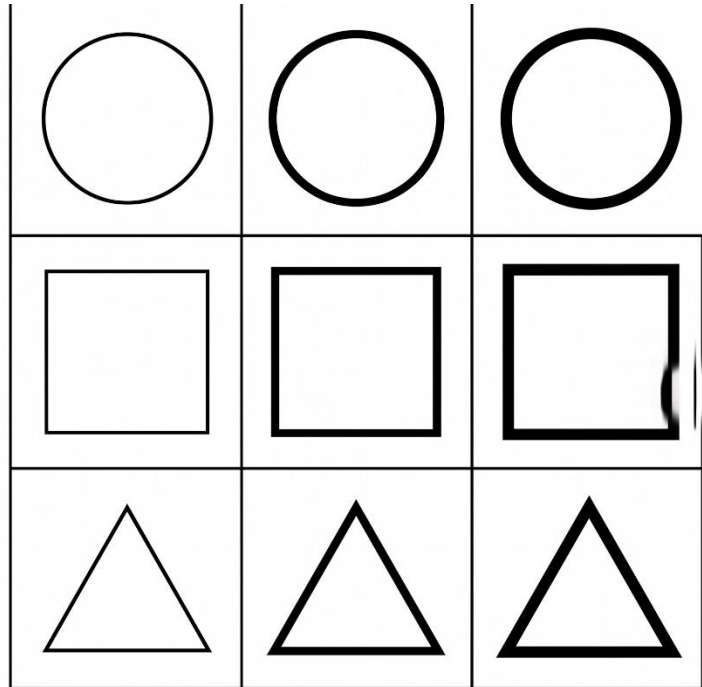


Figure PQ-11

- A. dot at 9 o'clock
- B. dot at 4:30 position
- C. dot at 7:30 position
- D. dot at 12 o'clock

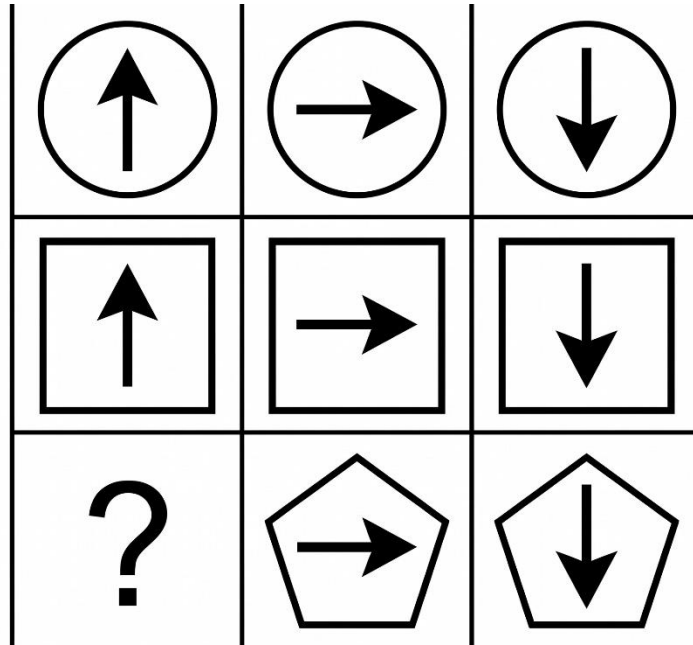
126. Which figure completes the 3×3 grid?

[Figure PQ-12]



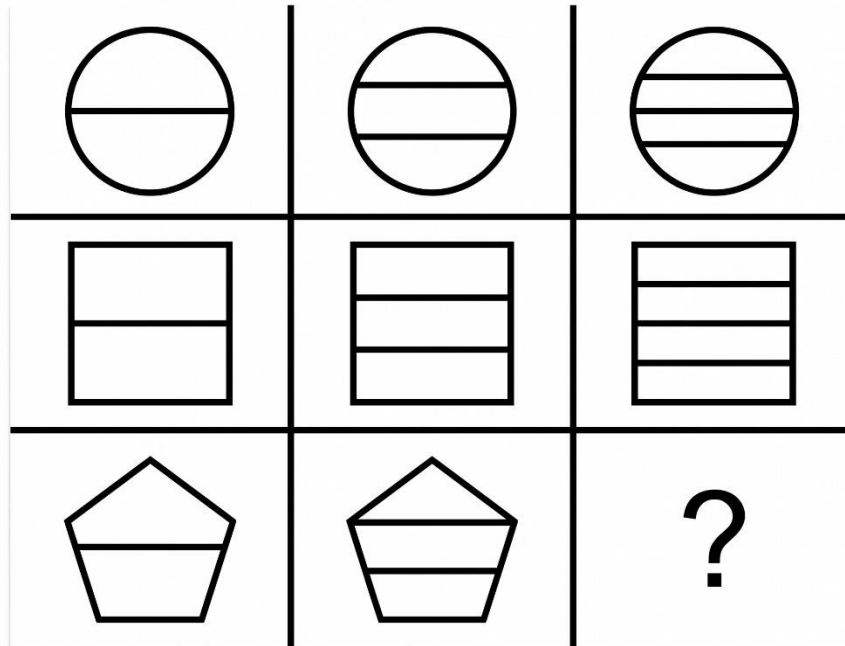
- A. thin triangle
- B. medium triangle
- C. thick triangle
- D. solid filled triangle

127. Which figure completes the 3×3 grid?



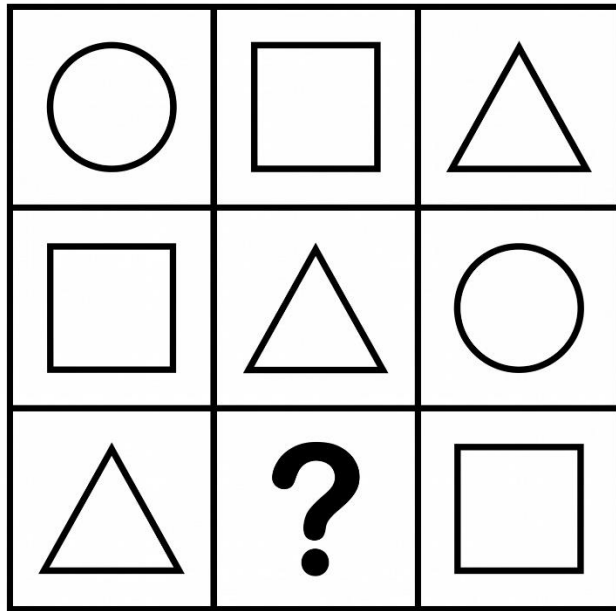
- A. pentagon with arrow up
- B. pentagon with arrow left
- C. pentagon with no arrow
- D. circle with arrow up

128. Which figure completes the 3×3 grid?



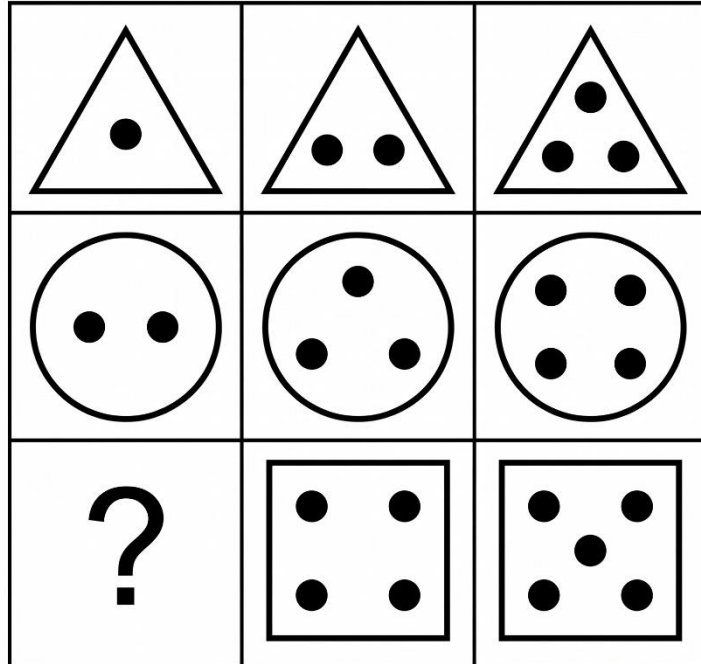
- A. pentagon with 1 stripe
- B. pentagon with 2 stripes
- C. pentagon with 4 stripes
- D. pentagon with 3 stripes

129. Which figure completes the 3×3 grid?



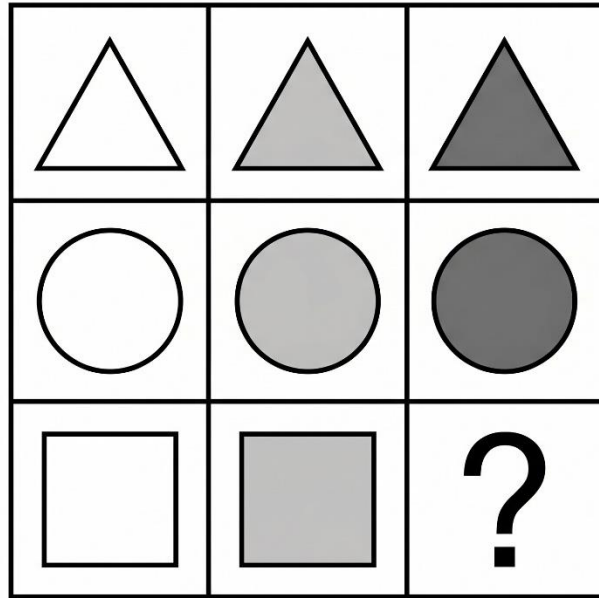
- A. triangle
- B. circle
- C. pentagon
- D. square

130. Which figure completes the 3×3 grid?



- A. square with 3 dots
- B. square with 2 dots
- C. square with 6 dots
- D. square with 7 dots

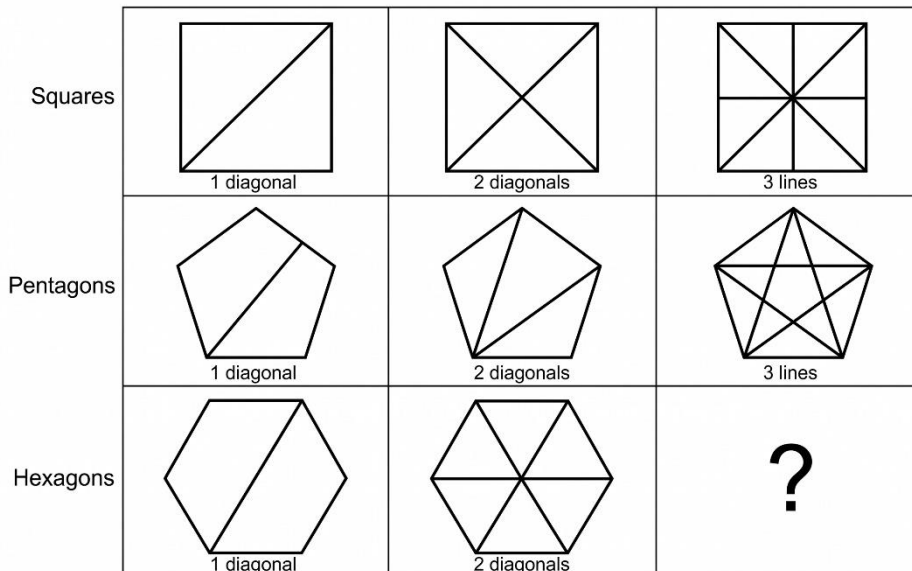
131. Which figure completes the 3×3 grid?



- A. white square
- B. light grey square
- C. dark grey square
- D. solid black square

132. Which figure completes the 3×3 grid?

Figure PQ-18: Polygonal Diagonal Progression



- A. hexagon with 1 diagonal
- B. hexagon with 2 diagonals
- C. hexagon with 4 diagonals
- D. hexagon with 3 diagonals

133. Which figure completes the 3×3 grid?

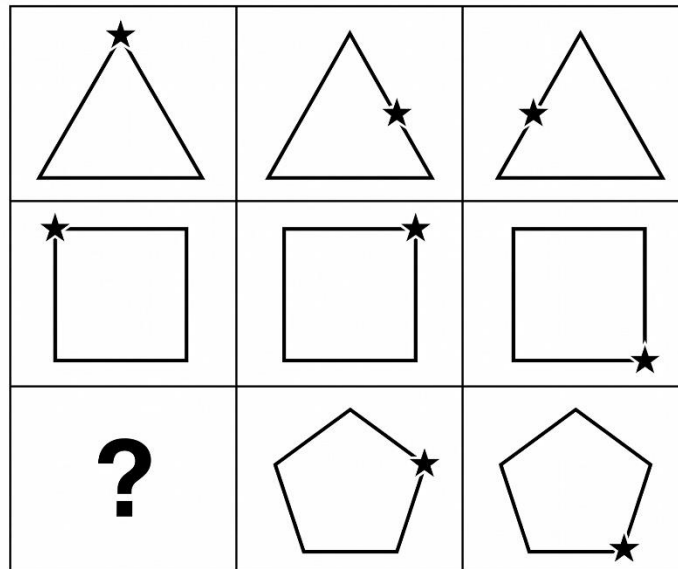
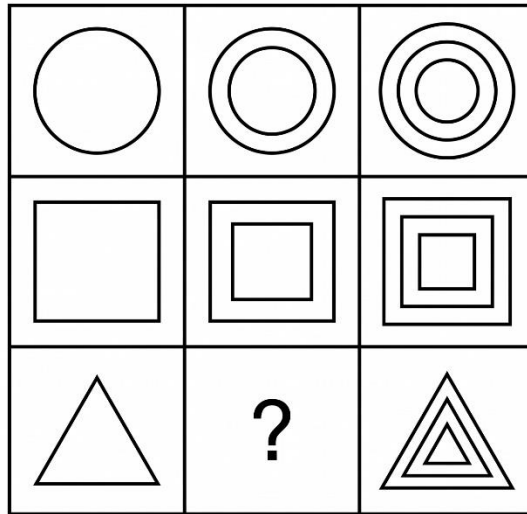


Figure PQ-19

- A. pentagon with star at top vertex
- B. pentagon with star at bottom-left
- C. pentagon with no star
- D. pentagon with stars at all vertices

134. Which figure completes the 3×3 grid?

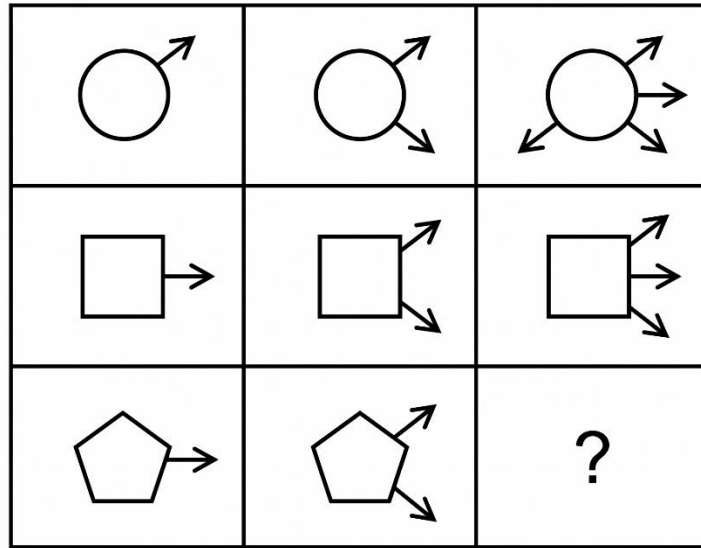


[Figure PQ-20: Clean black-line 3×3 grid on white background. Each row shows the same shape gaining concentric copies. Row 1: 1 circle, 2 concentric circles, 3 circles. Row 2: 1 square, 2 concentric squares, 3 squares. Row 3: 1 triangle, question mark ?, 3 concentric triangles.]

- A. 1 triangle alone
- B. 2 concentric triangles
- C. 4 concentric triangles
- D. 5 concentric triangles

135. Which figure completes the 3×3 grid?

[Figure PQ-21]

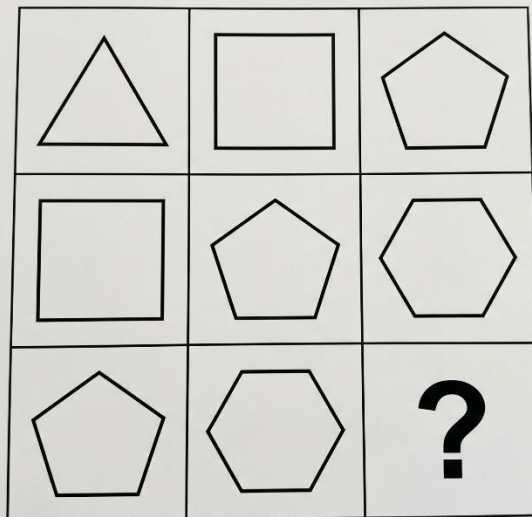


[Figure PQ-21]

- A. pentagon with 1 arrow
- B. pentagon with 2 arrows
- C. pentagon with 4 arrows
- D. pentagon with 3 arrows

136. Which figure completes the 3×3 grid?

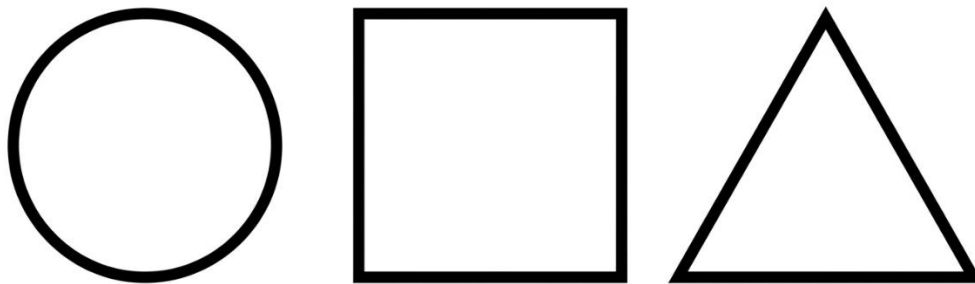
[Figure PQ-22]



- A. octagon (8 sides)
- B. nonagon (9 sides)
- C. heptagon (7 sides)
- D. decagon (10 sides)

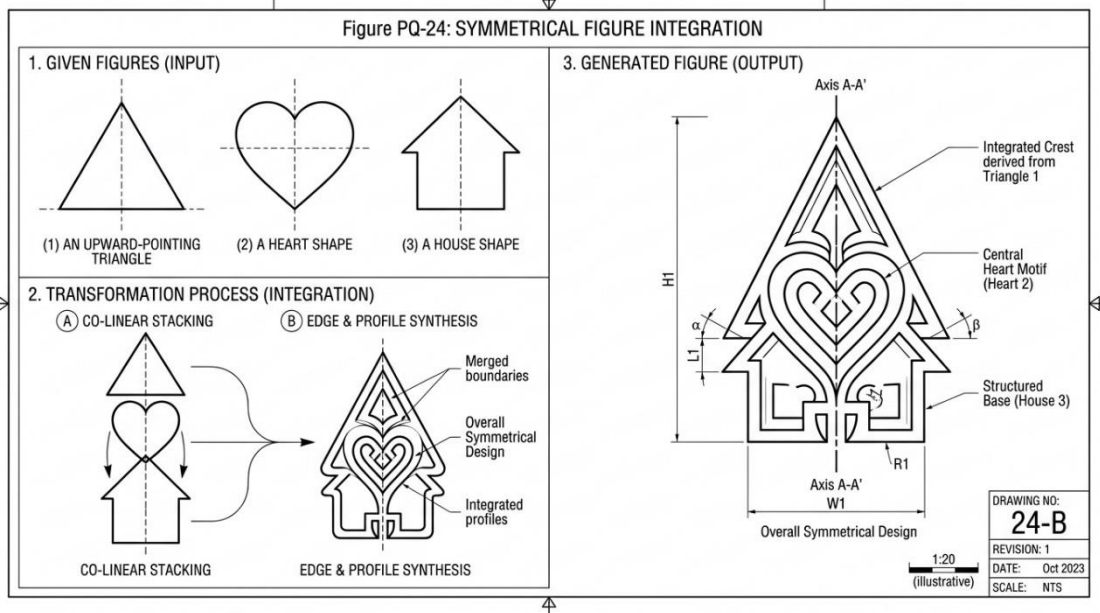
Section H — Figure Classification (Questions 137–158)

137. Which figure belongs with the three given?



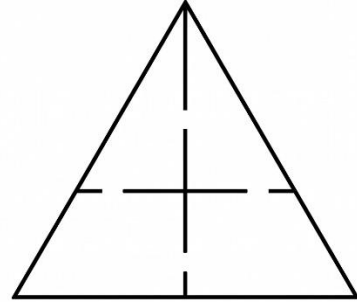
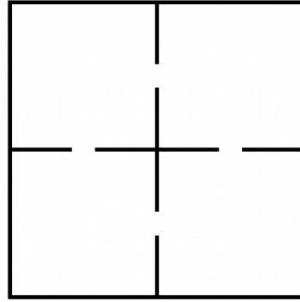
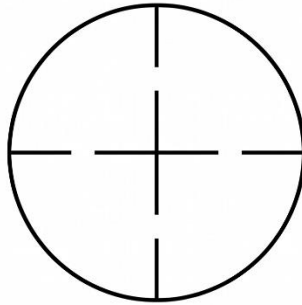
- A. pentagon with thick bold outline
- B. circle with thin outline
- C. solid black square
- D. dotted-outline triangle

138. Which figure belongs with the three given?



- A. parallelogram (no vertical symmetry)
- B. arrow pointing straight up (vertical symmetry)
- C. spiral shape
- D. wave line

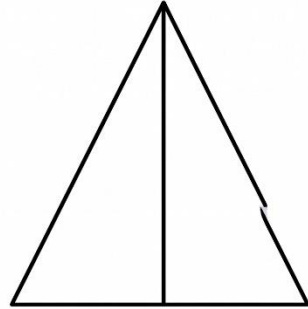
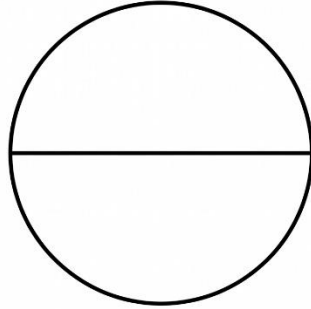
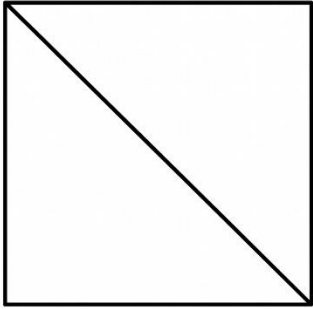
139. Which figure belongs with the three given?



- A. circle with no cross
- B. square containing an X mark instead
- C. triangle containing a star
- D. pentagon containing a plus-sign cross

140. Which figure belongs with the three given?

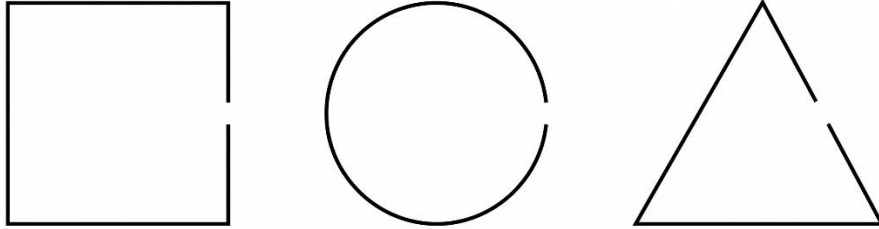
Figure PQ-26:



- A. square with two diagonals
- B. circle with no line
- C. pentagon with one diagonal line
- D. triangle with three lines

141. Which figure belongs with the three given?

[Figure PQ-27]



- A. pentagon with the right side missing
- B. complete pentagon
- C. square with left side missing
- D. circle with full outline

142. Which figure belongs with the three given?

[Figure PQ-28: Clean black-line technical diagram on white background.]

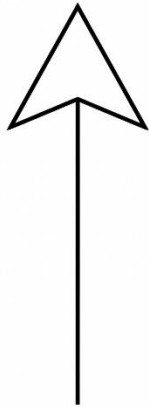


FIGURE 1: ARROW
POINTING UP

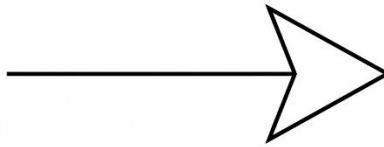


FIGURE 2: ARROW
POINTING RIGHT

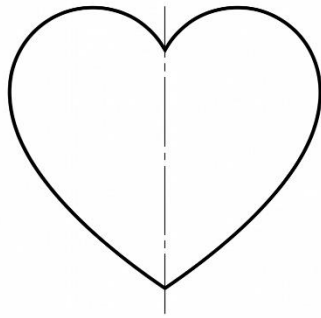


FIGURE 3: ARROW
POINTING DOWN

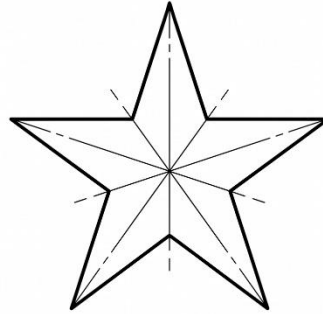
- A. circular spiral arrow
- B. diagonal arrow
- C. curved arrow
- D. arrow pointing left

143. Which figure belongs with the three given?

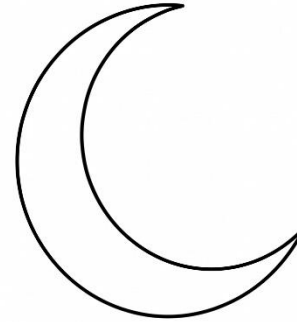
FIGURE PQ-29: Clean black-line technical diagram
Three Common Iconic Symbols: Heart, Star, Crescent Moon



HEART SHAPE



5-POINT STAR

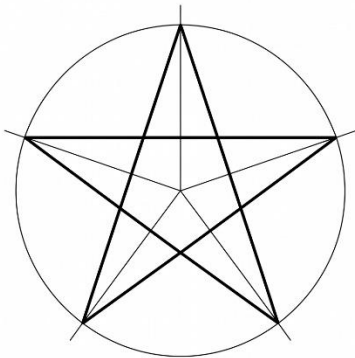


CRESCENT MOON
SHAPE

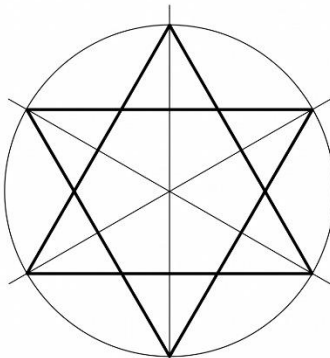
- A. plain circle outline
- B. lightning bolt
- C. blank square outline
- D. single dot

144. Which figure belongs with the three given?

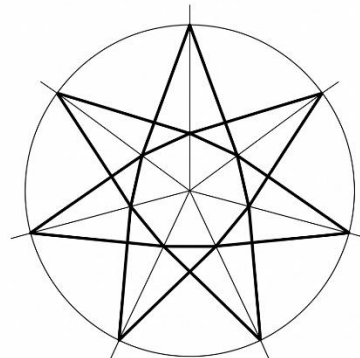
FIGURE PQ-30



5-POINT STAR



6-POINT STAR



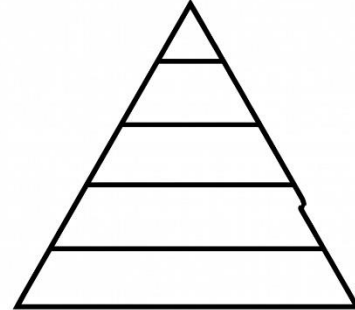
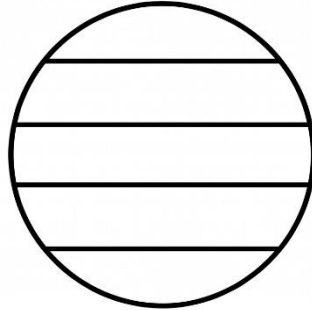
7-POINT STAR

Figure PQ-30

- A. solid filled 4-point star
- B. dotted-outline star
- C. outlined 8-point star
- D. solid filled circle

145. Which figure belongs with the three given?

[Figure PQ-31]



- A. dotted square
- B. circle with 2 stripes
- C. plain triangle
- D. pentagon containing 3 horizontal stripes

146. Which figure belongs with the three given?

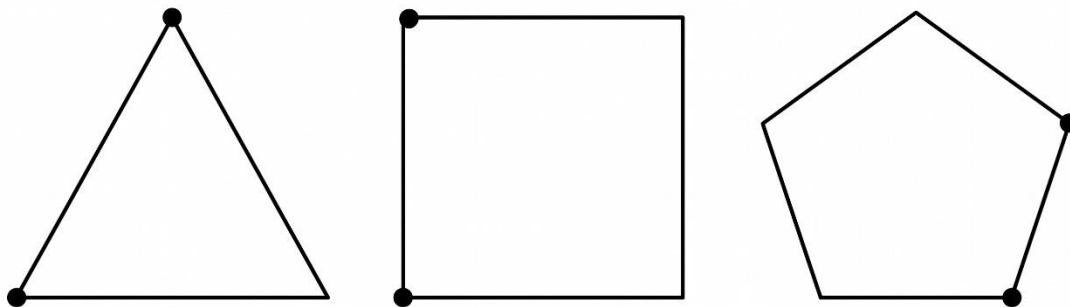


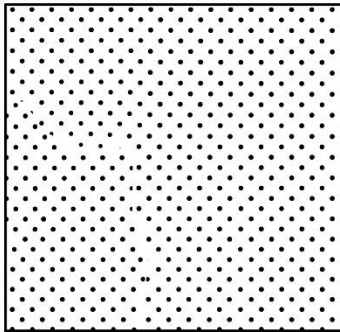
Figure PQ-32

- A. hexagon with 2 small dots at 2 vertices
- B. plain circle
- C. triangle with no dots
- D. square with five dots

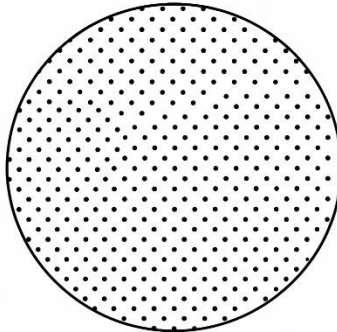
147. Which figure belongs with the three given?

Figure PQ-33

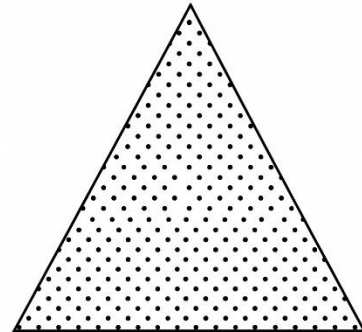
Clean black-line technical diagram. Three given figures shown in a row: square filled with dotted pattern, circle filled with dotted pattern, triangle filled with dotted pattern.



(a) Square with Dotted Fill



(b) Circle with Dotted Fill

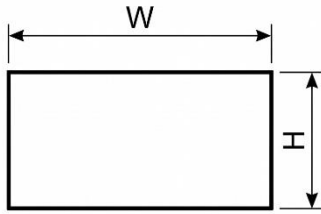


(c) Triangle with Dotted Fill

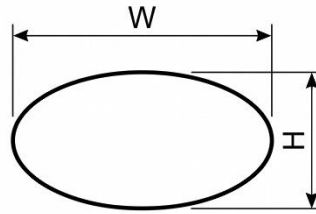
- A. striped square
- B. pentagon filled with dotted pattern
- C. plain circle
- D. solid black triangle

148. Which figure belongs with the three given?

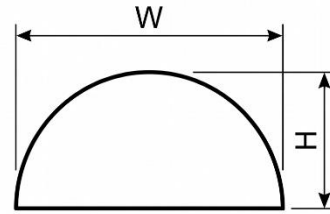
[Figure PQ-34]



Rectangle



Oval

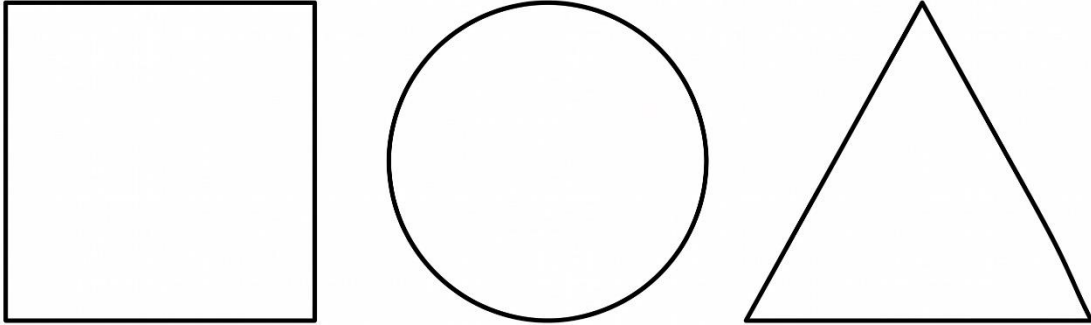


Arch Shape

- A. perfect circle (equal width and height)
- B. square (equal sides)
- C. ellipse oriented horizontally (wider than tall)
- D. shape taller than wide

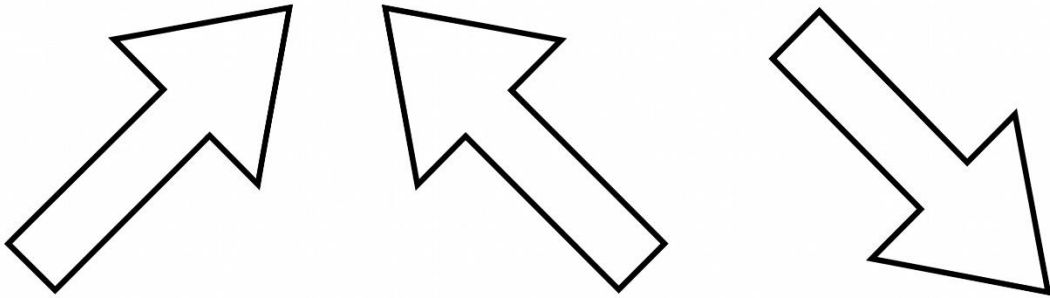
149. Which figure belongs with the three given?

[Figure PQ-35]



- A. solid black square
- B. solid black circle
- C. solid black triangle
- D. pentagon outline only with no fill

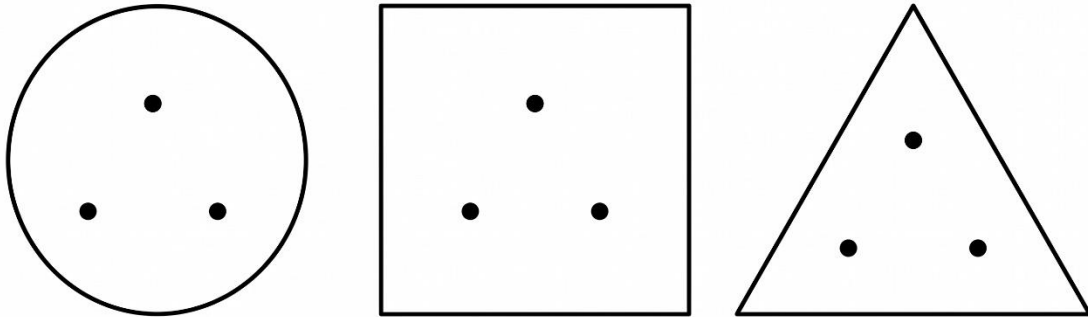
150. Which figure belongs with the three given?



- A. arrow pointing straight up
- B. arrow pointing diagonally down-left
- C. circular arrow
- D. horizontal arrow

151. Which figure belongs with the three given?

[Figure PQ-37]

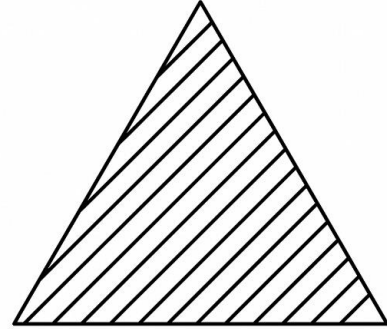
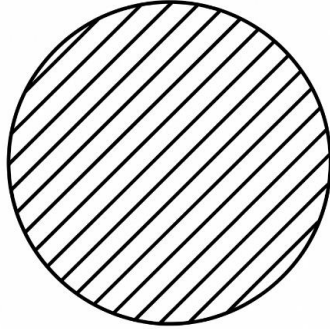
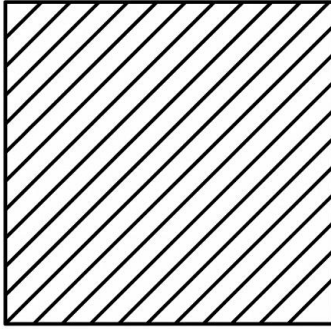


- A. circle with 2 dots
- B. square with 4 dots
- C. pentagon containing 3 small dots arranged in a triangular pattern
- D. triangle with a single dot

152. Which figure belongs with the three given?

[Figure PQ-38]

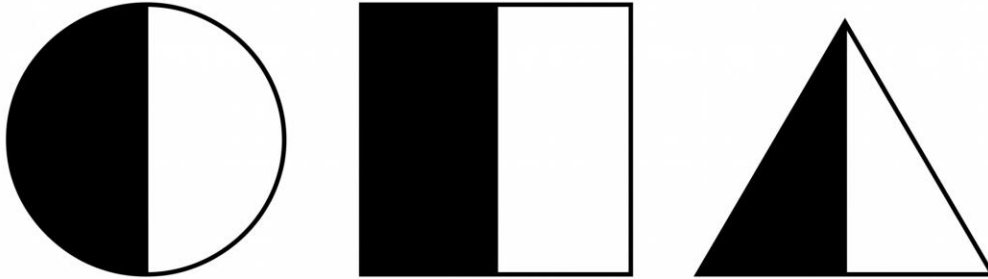
Given Figures:



- A. square with horizontal stripes
- B. pentagon filled with diagonal stripes
- C. plain circle
- D. solid black triangle

153. Which figure belongs with the three given?

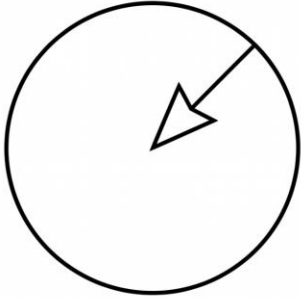
Figure PQ-39: Clean black-line technical diagram on white background.



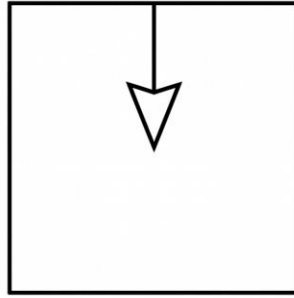
- A. fully shaded circle
- B. pentagon with the top half shaded
- C. unshaded pentagon
- D. pentagon with the left half shaded black

154. Which figure belongs with the three given?

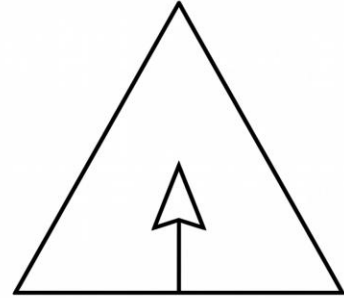
FIGURE PQ-40



CIRCLE



SQUARE

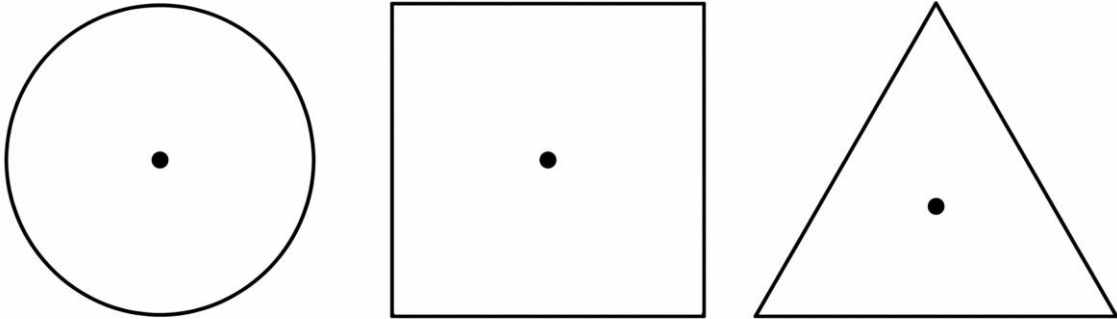


TRIANGLE

- A. pentagon with a small arrow protruding inward
- B. shape with no arrow
- C. shape with arrow pointing outward
- D. arrow alone

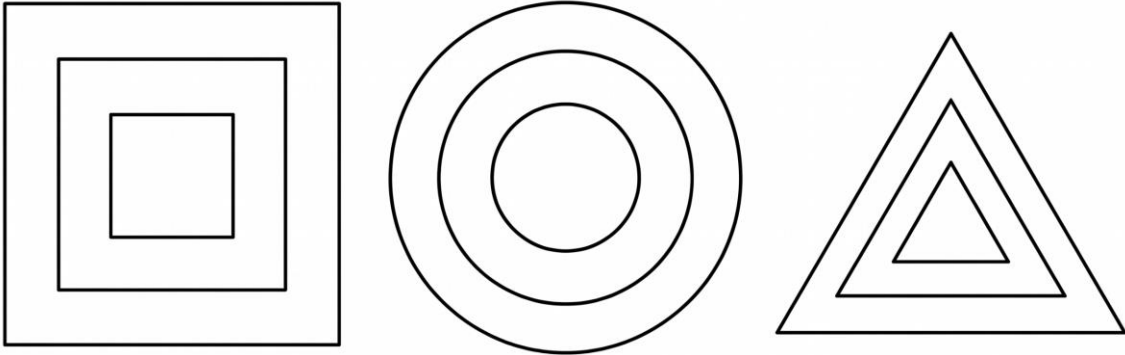
155. Which figure belongs with the three given?

Figure PQ-41



- A. circle with edge dot
- B. pentagon with a single small black dot at its centre
- C. triangle with no dot
- D. square with multiple dots

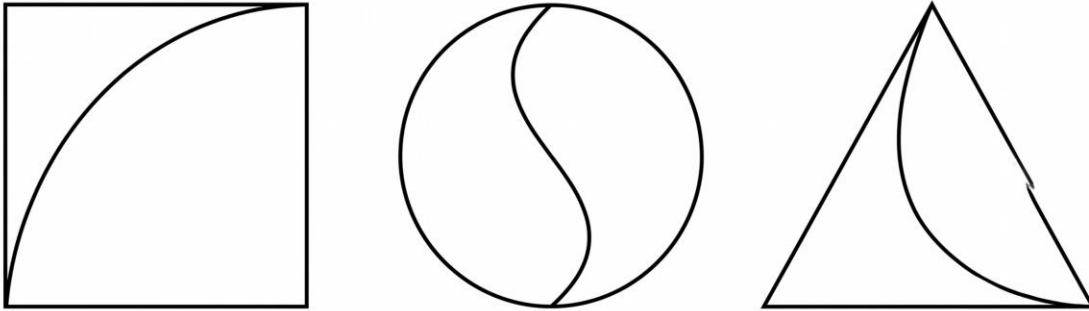
156. Which figure belongs with the three given?



- A. one single square
- B. two shapes side by side
- C. three concentric pentagons
- D. four concentric shapes

157. Which figure belongs with the three given?

[Figure PQ-43: Clean black-line technical diagram on white background.]



- A. pentagon containing a curved internal line
- B. shape with a straight line
- C. shape with no internal lines
- D. shape with multiple lines

158. Which figure belongs with the three given?

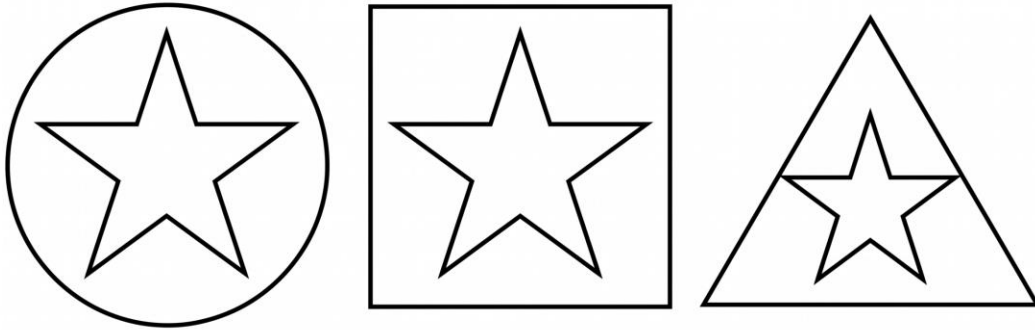
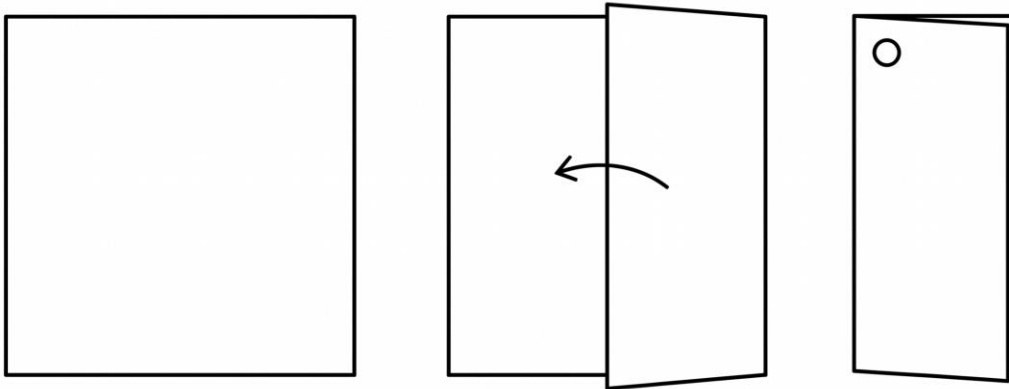


Figure PQ-44

- A. plain circle with nothing inside
- B. star alone with no outer shape
- C. pentagon containing a star
- D. shape containing a heart

Section I — Paper Folding (Questions 159–176)

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



- A. Two holes at the upper corners of the unfolded square
- B. One hole in the upper-left only
- C. Four holes at all corners
- D. Three holes

160. 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 four layers at the inner corner of the small folded square (the corner where both fold lines meet). When the paper is unfolded, what does it look like?

- A. Four holes at corners
- B. Two holes
- C. Three holes
- D. One hole at the centre of the unfolded square

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

- A. One hole near the top
- B. Two holes mirrored across the diagonal fold line
- C. Four holes
- D. Three holes

162. 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 four layers at the outer corner of the small folded square (the corner that lies on neither fold). When the paper is unfolded, what does it look like?

- A. Four holes — one at each corner of the unfolded square
- B. Two holes
- C. Six holes
- D. Eight holes

163. A square paper is folded in half along a vertical centre line. A hole is punched directly on the fold line at its midpoint. When the paper is unfolded, what does it look like?

- A. Two holes
- B. Four holes
- C. Three holes
- D. One hole at the centre of the unfolded square

164. A square paper is folded in half along a horizontal centre line. Two holes are punched through both layers along the top edge of the folded rectangle (which lies on the horizontal fold) — one near the left corner and one near the right corner. When the paper is unfolded, what does it look like?

- A. Four holes
- B. Two holes at top corners
- C. Two holes — one at the left-edge midpoint and one at the right-edge midpoint of the unfolded square
- D. One hole at the centre

165. A square paper is folded in half along a vertical centre line. Two holes are punched through both layers along the right edge of the folded rectangle (which lies on the vertical fold) at different heights. When the paper is unfolded, what does it look like?

- A. Two holes on the vertical centre line of the unfolded square, at different heights
- B. Four holes
- C. Three holes
- D. Six holes

166. A square paper is folded in half along a horizontal centre line. A hole is punched off the fold, at the exact centre of the folded rectangle. When the paper is unfolded, what does it look like?

- A. One hole at the centre
- B. Two holes stacked vertically along the vertical centre line, one above and one below the horizontal centre
- C. Four holes
- D. Three holes

167. A square paper is folded in half along a vertical centre line, then in half along a horizontal centre line, then in half diagonally from the upper-right corner to the lower-left corner of the small folded square. A hole is punched through all eight layers at the centre of the resulting triangle, off any fold line. When the paper is unfolded, what does it look like?

- A. 4 holes
- B. 6 holes
- C. 7 holes
- D. 8 holes arranged symmetrically about the centre

168. A square paper is folded diagonally from the top-right corner to the bottom-left corner. A hole is punched directly on the fold line at its midpoint. When the paper is unfolded, what does it look like?

- A. Two holes
- B. Four holes
- C. One hole at the centre of the unfolded square
- D. Three holes

169. A square paper is folded in half along a vertical centre line. Three holes are punched through both layers off the fold — one at the upper-left corner of the folded rectangle, one at the lower-left corner, and one at the centre of the folded rectangle (not on the fold). When the paper is unfolded, what does it look like?

- A. Six holes — three on the left side and three mirrored on the right side
- B. Three holes
- C. Eight holes
- D. Twelve holes

170. 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 four layers in the middle of the bottom edge of the small folded square (not at a corner and not on any fold). When the paper is unfolded, what does it look like?

- A. Two holes
- B. Six holes
- C. Eight holes
- D. Four holes — two on the top edge and two on the bottom edge, symmetrically placed about the vertical centre

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

- A. Three holes
- B. One hole on the vertical centre line of the unfolded square, near the bottom edge

- C. Four holes
- D. Two holes

172. A square paper is folded in half along a horizontal centre line. A hole is punched off the fold, along the right edge of the folded rectangle, vertically centred on that right edge. When the paper is unfolded, what does it look like?

- A. One hole on the right edge
- B. Three holes
- C. Two holes on the right edge of the unfolded square, symmetrically placed above and below the horizontal centre
- D. Four holes

173. A square paper is folded in half along a vertical centre line, then in half along a horizontal centre line, then in half along the diagonal of the small folded square (from the inner corner to the outer corner). A hole is punched directly on the diagonal fold line at its midpoint. When the paper is unfolded, what does it look like?

- A. Four holes symmetrically placed about the centre at quarter positions of the unfolded square
- B. Two holes
- C. Six holes
- D. Eight holes

174. A square paper is folded in half along a vertical centre line. A hole is punched on the fold line directly at its midpoint. When the paper is unfolded, what does it look like?

- A. Two holes
- B. Four holes
- C. Three holes
- D. One hole at the centre of the unfolded square

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

- A. Two holes at the bottom corners
- B. Four holes — one at each corner of the unfolded square
- C. Six holes
- D. Three holes

176. A square paper is folded in half along a vertical centre line, then in half along a horizontal centre line. Three holes are punched through all four layers, one at each of three different corners of the small folded square: the outer corner (off both folds), one edge corner on the vertical fold, and one edge corner on the horizontal fold. When the paper is unfolded, what does it look like?

- A. 4 holes
- B. 6 holes
- C. 8 holes — four at the corners of the unfolded square and four at the edge midpoints
- D. 12 holes

Practice Exam 6: Answer Key and Full Explanations

Section A — Verbal Analogies (Q1–24)

- 1. C** — Worker-to-workplace. An artist works in a studio, just as a scientist works in a laboratory. The pair links a professional to their characteristic workspace. Canvas, painting, and brush are studio-related but not the worker.
- 2. D** — Lack-of-essential-resource. Famine is a lack of harvest (failed crops), just as drought is a lack of rainfall. Each pair links a crisis to the essential resource that is missing. Hunger and starvation are effects of famine, not what is lacking; plenty is the opposite.
- 3. A** — Specialist-to-subject-studied. A linguist studies language, just as a physicist studies matter. The pair links an expert to the subject of their field. Word, speech, and book are language-associated but not the broad subject linguists study.
- 4. B** — Creator-to-creation. To choreograph is to create a dance, just as to compose is to create a song. The pair links a creative action to the artistic work produced. Music, stage, and perform are dance-associated but not the work itself.
- 5. A** — Need-to-fulfilment. Hunger is satisfied by food, just as thirst is satisfied by water. Each pair links a physiological need to the substance that fulfils it. Eat, plate, and cook are food-related actions or objects but not the substance itself.
- 6. C** — Locomotion organ. A wing enables a bird to fly, just as a fin enables a fish to swim. The pair links an animal to its primary movement organ. Claw, beak, and feather are bird parts but not the movement organ.
- 7. B** — Source-formation of material. Ice forms in a glacier, just as lava emerges from a volcano. Each pair links a substance to the natural formation it originates from. Winter, cold, and snow are ice-associated but not the formation source.
- 8. D** — Antonyms. Lenient is the opposite of strict, just as abundant is the opposite of scarce. Each pair links opposing qualities. Soft, mild, and easy are similar to lenient but strict is the direct antonym.
- 9. C** — Specialist-to-subject-studied. An ornithologist studies birds, just as a linguist studies words. The pair links an expert to the focus of their field. Animals is too broad, flying is an action, and sky is unrelated to the field.
- 10. A** — Structural element of an artistic work. A melody is the central musical line of a song, just as a plot is the central narrative line of a novel. The pair links a defining structural element to the work it belongs to. Tune, music, and notes are music-related but not the work itself.

- 11. D** — Athlete-to-primary-attribute. A sprinter relies on speed, just as a marathoner relies on endurance. Each pair links an athlete to the physical attribute their event demands. Distance, medal, and running are sprint-associated but not the defining attribute.
- 12. B** — Maker-to-product. A cartographer makes maps, just as a shipwright makes ships. The pair links a craftsperson to their characteristic product. Countries, travel, and geography are map-related but not the product itself.
- 13. C** — Container-to-content. An anthology contains collected stories, just as an encyclopedia contains collected facts. Each pair links a reference collection to its contents. Authors and books are anthology-related but not the contents themselves.
- 14. D** — Intensified form of the same condition. Parched means very thirsty, just as famished means very hungry. Each pair links a base state to its intensified version. Wet is the opposite, cold is unrelated, and drink is an action.
- 15. A** — Imperfect form of an action. To mumble is to speak unclearly, just as to scribble is to write carelessly. Each pair links a sloppy version of an action to the base action. Whisper, say, and talk are speech-related but speak is the parallel base verb.
- 16. B** — Part-to-whole. A sentence is part of a paragraph, just as a fragment is part of a whole. Each pair links a component to the larger unit it belongs to. Word is too small, text and essay are larger than a paragraph.
- 17. D** — Type-to-category. An oak is a type of tree, just as a cumulus is a type of cloud. Each pair links a specific example to its broader classification. Wood, forest, and acorn are oak-related but not the category.
- 18. C** — Breed-to-species. A dachshund is a breed of dog, just as a thoroughbred is a breed of horse. Each pair links a specific breed to its species. Small, pet, and brown describe dachshund traits but not the species.
- 19. B** — Solo performance in a larger work. An aria is a solo song within an opera, just as a soliloquy is a solo speech within a play. Each pair links a solo moment to its theatrical/musical genre. Instrument, song, and voice are aria-related but not the genre.
- 20. A** — Lowest-to-highest in a hierarchy. A pawn is the lowest-ranked chess piece and a queen is the highest, just as a novice is least skilled and an expert is most skilled. Each pair links opposing ends of a status ladder. Board, game, and piece are chess-related but queen is the parallel high-rank piece.
- 21. D** — Synonyms. To amplify means the same as to increase, just as to diminish means the same as to reduce. Each pair links words with the same meaning. Add, grow, and extend are related but increase is the closest synonym.
- 22. B** — Housing-to-animal. An aviary houses birds, just as a kennel houses dogs. Each pair links a specialised animal enclosure to its inhabitants. Cage is too generic, zoo houses many species, and fly is an action.

23. A — Adjective-to-typical-noun. Stale most commonly describes bread (or food generally), just as rusty most commonly describes metal. Each pair links a deterioration adjective to its archetypal noun. Old and flavour are stale-associated but bread is the archetypal noun; fresh is the opposite.

24. C — Group-name-to-members. An archipelago is a group of islands, just as a constellation is a group of stars. Each pair links a collective term to its component members. Continents, ocean, and boats are island-related but not the components.

Section B — Sentence Completion (Q25–44)

25. B — Overwhelming quantity. Abundance describes evidence so plentiful that the case becomes undeniable. Shortage, lack, and small amount contradict the undeniable-case outcome described.

26. D — Persistent determined effort. Tenacious describes a chess approach that refuses to give up, earning a national championship at a young age. Careless, casual, and weak contradict championship-level dedication.

27. A — Continuously watchful. Vigilant describes a lifeguard remaining alert and scanning for trouble throughout her shift. Relaxed, distracted, and drowsy contradict the constant alertness lifeguarding requires.

28. C — About to happen. Imminent describes a storm whose arrival is indicated by dark clouds and falling pressure. Unlikely, distant, and mild contradict the strong warning signs.

29. A — Careful sustained effort. Diligent describes research that has taken months of careful study. Lazy, brief, and casual contradict the months-long careful work the professor praised.

30. B — Difficult and unclear. Obscure describes an inscription so hard to read that years of specialised study are required. Clear, obvious, and easy contradict the need for expert consultation.

31. D — Passionately devoted. Ardent describes a supporter who dedicates every weekend to volunteering. Casual, occasional, and reluctant contradict the level of dedication described.

32. C — Constantly changing. Fluctuating describes stock prices that vary so the economist must study patterns within their movement. Stable, steady, and constant contradict the variability the economist analyses.

33. B — Threatening and foreboding. Ominous describes a silence that creates unease even for the courageous. Peaceful, comfortable, and welcoming contradict the haunted-house feeling of dread.

34. A — Filled with intense joy. Elated describes Maria's feeling at being accepted into a prestigious national gallery. Disappointed, confused, and annoyed contradict the joyful achievement.

35. D — Non-representational art form. Abstract describes paintings that use colour and shape to convey emotion rather than depict recognisable objects. Realistic, detailed, and portrait describe representational styles, the opposite of what the sentence specifies.

36. C — Open and frank. Candid describes answers that reveal personal details rarely shared, which the interviewer would naturally appreciate. Evasive, dishonest, and brief contradict the revealing nature of the answers.

37. A — Fresh and original. Novel describes an approach that combines techniques from fields never used together before. Routine, tired, and ordinary contradict the originality the sentence emphasises.

38. D — Alert and cautious. Wary describes a hiker who becomes suspicious of strange noises and retreats quietly. Excited, eager, and friendly contradict the cautious retreat to safety.

39. B — Modest and economical. Frugal describes a life of restrained spending, allowing the philanthropist to donate most of her income. Lavish, extravagant, and luxurious contradict the modest lifestyle.

40. C — Dangerous and risky. Perilous describes an ocean voyage that tests both navigation skills and courage. Calm, peaceful, and shallow contradict the danger that requires courage.

41. D — Firm and unyielding. Resolute describes a leader whose commitment to non-violence does not waver under opposition. Uncertain, wavering, and confused contradict the firmness the situation demands.

42. A — Examine closely and critically. Scrutinise describes the careful inspection judges perform to detect small mistakes affecting the score. Ignore, skip, and overlook contradict the close examination required.

43. B — Open to multiple interpretations. Ambiguous describes a statement so unclear that investigators cannot determine what happened. Clear, direct, and precise contradict the investigators' uncertainty.

44. C — Respected through long experience. Venerable describes a scholar of fifty years' standing with numerous influential books. Young, amateur, and inexperienced contradict the long career and accumulated reputation.

Section C — Verbal Classification (Q45–60)

45. D — Inner terrestrial planets. Mars belongs with Mercury, Venus, and Earth as the four rocky inner planets of the solar system. Jupiter, Saturn, and Uranus are gas giants in the outer solar system.

46. B — Famous painters. Rembrandt belongs with Picasso, Monet, and Dalí as celebrated visual artists working in paint. Beethoven was a composer, Shakespeare a playwright, and Edison an inventor.

47. A — Tree nuts. Cashew belongs with almond, walnut, and pecan as edible nuts grown on trees. Apple is a fruit, potato a tuber, and carrot a root vegetable.

48. C — Bowed string instruments. Double bass belongs with violin, viola, and cello as members of the bowed string family in an orchestra. Flute and trumpet are wind instruments, and drum is percussion.

49. D — Severe storm events. Tornado belongs with blizzard, hurricane, and typhoon as destructive weather events characterised by violent atmospheric conditions. Rainbow, sunshine, and cloud are calm weather features.

50. A — Ancient Greek thinkers. Pythagoras belongs with Plato, Socrates, and Aristotle as influential thinkers of ancient Greece who shaped Western intellectual tradition. Da Vinci was Renaissance Italian, Shakespeare Elizabethan English, and Einstein 20th-century German-American.

51. B — Named volcanoes. Mount Fuji belongs with Vesuvius, Etna, and Krakatoa as famous named volcanoes. Mount Everest and Mount Logan are non-volcanic peaks, and Kilimanjaro is most commonly grouped as a mountain.

52. C — Asian capital cities. Bangkok belongs with Beijing, Tokyo, and Seoul as capital cities of Asian nations. Paris is European, Cairo African, and Sydney is in Australia (and is not Australia's capital).

53. A — Amphibians. Toad belongs with frog, salamander, and newt as amphibians that live partly in water and partly on land. Snake, lizard, and turtle are reptiles.

54. D — Medical instruments. Stethoscope belongs with scalpel, forceps, and thermometer as tools used by medical professionals to examine or treat patients. Wrench, saw, and screwdriver are general construction tools.

55. B — Large-scale classical music forms. Opera belongs with oratorio, symphony, and concerto as substantial multi-movement or multi-section classical compositions. Song, melody, and tune refer to small individual musical units, not large-scale works.

56. C — Major deserts. Atacama belongs with Sahara, Gobi, and Kalahari as named deserts found on different continents. Amazon is a rainforest/river, Alps is a mountain range, and Atlantic is an ocean.

57. A — Woodwind instruments. Flute belongs with saxophone, oboe, and clarinet as woodwind instruments that produce sound through air vibration. Trumpet is brass, drum is percussion, and piano is a keyboard string instrument.

58. D — Aquatic mammals. Walrus belongs with dolphin, manatee, and whale as mammals that live in or near water and breathe air. Shark and tuna are fish, and octopus is a mollusc.

59. C — Highest points. Apex belongs with summit, peak, and crest as words meaning the very top of something. Valley, base, and bottom are the opposite — low points.

60. B — Three-dimensional shapes. Cone belongs with sphere, cube, and cylinder as solids with measurable volume. Circle, square, and triangle are two-dimensional figures with no depth.

Section D — Number Analogies (Q61–78)

61. D — Rule: multiply by 5. $6 \times 5 = 30$, $8 \times 5 = 40$, so $10 \times 5 = 50$. Each second number is five times the first.

- 62. A** — Rule: divide by 12. $96 \div 12 = 8$, $84 \div 12 = 7$, so $60 \div 12 = 5$. Each second number is one-twelfth the first.
- 63. C** — Rule: multiply by 3, add 1. $5 \times 3 + 1 = 16$, $8 \times 3 + 1 = 25$, so $11 \times 3 + 1 = 34$. The same two-step operation applies to each pair.
- 64. B** — Rule: $n \times (n+2)$. $3 \times 5 = 15$... wait, $3 \times 4 = 12$, $5 \times 6 = 30$, so $7 \times 8 = 56$. The second number equals the first multiplied by its next-consecutive integer.
- 65. D** — Rule: divide by 4. $24 \div 4 = 6$, $40 \div 4 = 10$, so $60 \div 4 = 15$. Each second number is one-quarter the first.
- 66. A** — Rule: multiply by 3, add 1. $4 \times 3 + 1 = 13$, $6 \times 3 + 1 = 19$, so $9 \times 3 + 1 = 28$. The same two-step operation applies to all pairs.
- 67. B** — Rule: square root. $\sqrt{49} = 7$, $\sqrt{64} = 8$, so $\sqrt{81} = 9$. Each second number is the square root of the first.
- 68. D** — Rule: multiply by 12. $3 \times 12 = 36$, $4 \times 12 = 48$, so $5 \times 12 = 60$. Each second number is twelve times the first.
- 69. C** — Rule: divide by 25. $100 \div 25 = 4$, $75 \div 25 = 3$, so $125 \div 25 = 5$. Each second number is one twenty-fifth the first.
- 70. A** — Rule: multiply by 2, add 1. $8 \times 2 + 1 = 17$, $12 \times 2 + 1 = 25$, so $15 \times 2 + 1 = 31$. The same two-step operation applies to all pairs.
- 71. D** — Rule: square. $6^2 = 36$, $9^2 = 81$, so $11^2 = 121$. Each second number is the first multiplied by itself.
- 72. B** — Rule: divide by 7. $84 \div 7 = 12$, $56 \div 7 = 8$, so $35 \div 7 = 5$. Each second number is one-seventh the first.
- 73. A** — Rule: multiply by 8. $3 \times 8 = 24$, $5 \times 8 = 40$, so $7 \times 8 = 56$. Each second number is eight times the first.
- 74. D** — Rule: divide by 2, subtract 1. $12 \div 2 - 1 = 5$, $16 \div 2 - 1 = 7$, so $20 \div 2 - 1 = 9$. The same two-step operation applies to all pairs.
- 75. C** — Rule: square. $3^2 = 9$, $4^2 = 16$, so $6^2 = 36$. Each second number is the first multiplied by itself.
- 76. A** — Rule: divide by 5. $15 \div 5 = 3$, $35 \div 5 = 7$, so $50 \div 5 = 10$. Each second number is one-fifth the first.
- 77. B** — Rule: multiply by 4, subtract 1. $3 \times 4 - 1 = 11$, $5 \times 4 - 1 = 19$, so $8 \times 4 - 1 = 31$. The same two-step operation applies to all pairs.
- 78. C** — Rule: $n^2 + n$. $1^2 + 1 = 2$, $2^2 + 2 = 6$, so $3^2 + 3 = 12$. The second number equals the first squared plus the first itself.

Section E — Number Series (Q79–96)

- 79. B** — Rule: perfect squares. Sequence is $2^2, 3^2, 4^2, 5^2, 6^2$, so the next term is $7^2=49$. Each term is a consecutive integer squared.
- 80. A** — Rule: multiply by 2, add 1. $3 \times 2 + 1 = 7, 7 \times 2 + 1 = 15, 15 \times 2 + 1 = 31, 31 \times 2 + 1 = 63$, so $63 \times 2 + 1 = 127$. The same two-step operation applies to each term.
- 81. C** — Rule: multiply by 2, add 1. $2 \times 2 + 1 = 5, 5 \times 2 + 1 = 11, 11 \times 2 + 1 = 23, 23 \times 2 + 1 = 47$, so $47 \times 2 + 1 = 95$. The same two-step operation applies to each term.
- 82. D** — Rule: subtract increasing multiples of 5. Differences are $-5, -10, -15, -20, -25$. From 50 subtract 25 to get 25. The gap grows by 5 each step.
- 83. A** — Rule: differences increase by 2. Differences are $+6, +8, +10, +12, +14$. From 41 add 14 to get 55. The gaps grow by two each step.
- 84. B** — Rule: perfect cubes. Sequence is $1^3, 2^3, 3^3, 4^3, 5^3$, so the next term is $6^3=216$. Each term is a consecutive integer cubed.
- 85. D** — Rule: multiply by 2, subtract 1. $2 \times 2 - 1 = 3, 3 \times 2 - 1 = 5, 5 \times 2 - 1 = 9, 9 \times 2 - 1 = 17, 17 \times 2 - 1 = 33$, so $33 \times 2 - 1 = 65$. The same two-step operation applies to each term.
- 86. C** — Rule: triangular numbers. Differences are $+2, +3, +4, +5, +6, +7$. From 21 add 7 to get 28. Each term is the sum of the first n consecutive integers.
- 87. B** — Rule: divide by 3. Sequence shrinks by $\div 3$ ($729, 243, 81, 27$), so the next term is $27 \div 3 = 9$. A geometric decrease with ratio one-third.
- 88. A** — Rule: multiply by 2, add 2. $2 \times 2 + 2 = 6, 6 \times 2 + 2 = 14, 14 \times 2 + 2 = 30, 30 \times 2 + 2 = 62$, so $62 \times 2 + 2 = 126$. The same two-step operation applies to each term.
- 89. D** — Rule: multiply by 2, add 2. $1 \times 2 + 2 = 4, 4 \times 2 + 2 = 10, 10 \times 2 + 2 = 22, 22 \times 2 + 2 = 46$, so $46 \times 2 + 2 = 94$. The same two-step operation applies to each term.
- 90. C** — Rule: differences increase by 4. Differences are $+8, +12, +16, +20, +24$. From 60 add 24 to get 84. The gaps grow by four each step.
- 91. B** — Rule: divide by 2. Sequence halves ($200, 100, 50, 25, 12.5$), so the next term is $12.5 \div 2 = 6.25$. A geometric decrease producing a decimal.
- 92. D** — Rule: multiples of 13. $13 \times 1 = 13, 13 \times 2 = 26, 13 \times 3 = 39, 13 \times 4 = 52, 13 \times 5 = 65$, so $13 \times 6 = 78$. Each term is the next multiple of 13.
- 93. A** — Rule: double. Sequence multiplies by 2 ($3, 6, 12, 24, 48$), so the next term is $48 \times 2 = 96$. A geometric progression with ratio 2.

94. C — Rule: perfect squares. Sequence is $3^2, 4^2, 5^2, 6^2, 7^2$, so the next term is $8^2=64$. Each term is a consecutive integer squared.

95. B — Rule: multiples of 7. $7 \times 1=7, 7 \times 2=14, 7 \times 3=21, 7 \times 4=28, 7 \times 5=35$, so $7 \times 6=42$. Each term is the next multiple of 7.

96. C — Rule: differences increase by 3. Differences are +4, +7, +10, +13, +16, +19. From 51 add 19 to get 70. The gaps grow by three each step.

Section F — Number Puzzles (Q97–114)

97. A — Order of operations. Multiply before adding: $9 \times 6=54$, then $54+7=61$. Multiplication takes precedence over addition.

98. B — Two-step substitution. From $\diamond \times 11=99$, $\diamond=9$. Then $\diamond+14=9+14=23$. Solve for the symbol first, then add.

99. D — Division. $180 \div 12=15$. Direct calculation by long division or recognising $15 \times 12=180$.

100. C — Substitution with exponents. Replace $\triangle=8$ and $\circ=6$. $\triangle^2=64$ and $\circ^2=36$. Then $64-36=28$. Squaring applies before subtraction.

101. B — Order of operations. Multiply each product first: $5 \times 5=25$ and $5 \times 5=25$. Then $25+25=50$. Multiplication precedes addition.

102. A — Two-step substitution with squaring. From $\star \times 6=72$, $\star=12$. Then $\star^2=12 \times 12=144$. Solve for the symbol first, then square.

103. D — Order of operations with parentheses. Multiply inside parentheses first: $4 \times 9=36$. Then $100-36=64$. Parentheses force the multiplication before the subtraction.

104. C — Substitution with cubing. Replace $\diamond=5$. Then $\diamond^3=5 \times 5 \times 5=125$. Then $125-25=100$. Cubing applies before subtraction.

105. D — Order of operations. Multiply before adding: $6 \times 8=48$, then $7+48=55$. Multiplication takes precedence over addition.

106. A — Order of operations. Divide before adding: $84 \div 7=12$, then $12+5=17$. Division takes precedence over addition.

107. B — Two-step substitution. From $\triangle \times 8=96$, $\triangle=12$. Then $\triangle \times 5=12 \times 5=60$. Solve for the symbol first, then multiply.

108. C — Order of operations (left-to-right for equal precedence). Multiply first: $15 \times 8=120$. Then $120 \div 4=30$. Multiplication and division have equal precedence, so they execute left to right.

109. B — Sum of squares. $6^2=36$ and $8^2=64$. Then $36+64=100$. Squaring applies before addition.

110. A — Two-step substitution with squaring. From $\star+17=25$, $\star=8$. Then $\star^2=8\times 8=64$. Solve for the symbol first, then square.

111. D — Order of operations. Divide before adding: $200\div 8=25$, then $25+4=29$. Division takes precedence over addition.

112. C — Order of operations. Multiply each product first: $9\times 4=36$ and $6\times 3=18$. Then $36-18=18$. Multiplication precedes subtraction.

113. B — Two-step substitution. From $\diamond\times\diamond=169$, $\diamond=13$ (since $13\times 13=169$). Then $\diamond+10=13+10=23$. Take the square root first, then add.

114. C — Order of operations. Multiply before subtracting: $17\times 5=85$, then $85-35=50$. Multiplication takes precedence over subtraction.

Section G — Figure Matrices (Q115–136)

115. D — Element-addition progression. Each row adds one decorative element per cell (alone \rightarrow with 1 dot \rightarrow with 1 dot and 1 cross). The triangle row must end with the triangle containing both a dot and a cross to complete the progression.

116. B — Rule: 90° clockwise rotation per cell. Bottom row goes P upright \rightarrow ? \rightarrow P rotated 180° . Continuing the rotation from upright by 90° clockwise gives P rotated 90° clockwise as the middle cell.

117. A — Size progression small \rightarrow medium \rightarrow large. Each row grows in three steps. The arrow row must start with the small arrow to begin the size progression.

118. C — Fill darkening progression white \rightarrow grey \rightarrow black. Each row darkens in three steps. The triangle row must end with the black triangle to complete the fill progression.

119. D — Rule: 45° clockwise rotation per cell. Bottom row goes pentagon up \rightarrow pentagon at 45° CW \rightarrow ?. Continuing the rotation gives pentagon rotated 90° clockwise.

120. A — Dot count constant per row. Each row's three shapes all hold the same dot count (4 in row 1, 5 in row 2, 6 in row 3). The bottom row must end with the pentagon containing 6 dots to maintain the row's constant.

121. B — Bold-side count progression. Each row increases bold sides by 1 per cell (1 \rightarrow 2 \rightarrow 3). The pentagon row's middle cell must contain 2 bold sides to complete the increasing progression.

122. C — Shape pairing shift. Each row cycles through three nested shape pairs with a position shift. The third row's missing cell must contain circle inside triangle to complete the shifted set.

123. A — Concentric-level progression $1 \rightarrow 2 \rightarrow 3$. Each row grows from a single shape to two concentric to three concentric. The triangle row must start with 1 triangle to begin the concentric progression.

124. D — Numerals increase by 3 per column and per row. Bottom row of pentagons goes $9 \rightarrow 12 \rightarrow ?$, so the final cell contains $12+3=15$. The pattern adds 3 across columns.

125. B — Clockwise dot rotation by 45° (1.5 clock hours) per cell. Bottom row goes dot at 3 o'clock $\rightarrow ? \rightarrow$ dot at 6 o'clock. The middle cell continues the rotation to dot at 4:30 position.

126. C — Outline-thickness progression thin \rightarrow medium \rightarrow thick. Each row thickens in three steps. The triangle row must end with the thick-outlined triangle to complete the thickness progression.

127. A — Internal arrow rotates 90° clockwise across columns (up \rightarrow right \rightarrow down). Bottom row starts with the pentagon containing an arrow pointing up to begin the rotation sequence.

128. D — Stripe count progression $1 \rightarrow 2 \rightarrow 3$. Each row increases horizontal stripes by 1 per cell. The pentagon row must end with the pentagon containing 3 stripes to complete the progression.

129. B — Cyclic shape rotation per row. Each row cycles through circle, square, triangle in a rotating order. The bottom row's middle cell must be circle to maintain the cycle.

130. A — Dot count progression with row offset. Each row's dots increase by 1 per column, with the starting count rising by 1 per row. The square row begins at 3 dots, so the first cell shows square with 3 dots.

131. C — Shading darkness progression white \rightarrow light grey \rightarrow dark grey. Each row darkens in three steps. The square row must end with the dark grey square to complete the shading progression.

132. D — Diagonal-line count progression $1 \rightarrow 2 \rightarrow 3$. Each row's polygon adds one internal diagonal per cell. The hexagon row must end with the hexagon containing 3 diagonals to complete the progression.

133. A — Star moves clockwise around vertices. Bottom row begins with the star at the pentagon's top vertex, then moves to the upper-right vertex, then to the lower-right vertex. The first cell must show the star at the top vertex.

134. B — Concentric-level progression $1 \rightarrow 2 \rightarrow 3$. Each row grows from one shape to two concentric to three concentric. The triangle row's middle cell must be 2 concentric triangles to complete the progression.

135. D — External-arrow count progression $1 \rightarrow 2 \rightarrow 3$. Each row's shape gains one outward arrow per cell. The pentagon row must end with the pentagon carrying 3 external arrows to complete the progression.

136. C — Side-count shift across rows. Each row shifts the side-count sequence by one position. The pentagon-hexagon-? row must end with a heptagon (7 sides) to continue the +1 progression.

Section H — Figure Classification (Q137–158)

- 137. A** — Shared attribute: thick bold outline. All three given shapes have noticeably thick black borders. The pentagon with a thick bold outline continues the bold-border attribute.
- 138. B** — Shared attribute: vertical-axis (left-right) symmetry. The given shapes (upward triangle, heart, house) are all symmetric about a vertical line. The arrow pointing straight up also has vertical-axis symmetry.
- 139. D** — Shared attribute: shape containing a plus-sign cross. All three given shapes have a plus-shaped cross drawn inside. The pentagon containing a plus-sign cross continues the inner-cross attribute.
- 140. C** — Shared attribute: exactly one internal line. The given shapes each have one straight line drawn inside. The pentagon with one diagonal line continues the single-internal-line attribute.
- 141. A** — Shared attribute: right side or right arc missing from outline. The given shapes each have a gap where the right boundary segment is absent. The pentagon with the right side missing continues the right-gap attribute.
- 142. D** — Shared attribute: straight arrow in a cardinal direction. The given arrows point up, right, and down. The arrow pointing left completes the four-cardinal-direction set.
- 143. B** — Shared attribute: common iconic symbol. The given figures (heart, star, crescent moon) are all instantly recognisable iconic shapes. The lightning bolt is another iconic symbol of the same kind.
- 144. C** — Shared attribute: outlined multi-point star with increasing points. The given are outlined 5-point, 6-point, and 7-point stars. The outlined 8-point star continues the multi-point series.
- 145. D** — Shared attribute: shape containing 3 horizontal stripes. The given shapes all have exactly three horizontal stripes inside. The pentagon with 3 horizontal stripes continues the same fill pattern.
- 146. A** — Shared attribute: polygon with 2 dots at vertices. The given shapes (triangle, square, pentagon) each have 2 small dots placed at 2 of their vertices. The hexagon with 2 vertex dots continues the two-vertex-dot attribute.
- 147. B** — Shared attribute: filled with dotted pattern. The given shapes (square, circle, triangle) all have a dotted fill. The pentagon filled with dotted pattern continues the same fill type.
- 148. C** — Shared attribute: wider than tall. The given shapes (rectangle, oval, arch) are all wider than they are tall. The horizontal ellipse continues the wider-than-tall attribute.
- 149. D** — Shared attribute: outline only with no fill. The given shapes (square, circle, triangle) all have empty outlines. The pentagon outline only with no fill continues the empty-outline attribute.
- 150. B** — Shared attribute: arrow pointing along a diagonal direction. The given arrows point up-right, up-left, and down-right (all at 45° angles). The arrow pointing down-left completes the four-diagonal set.

151. C — Shared attribute: shape containing 3 dots in a triangular arrangement. The given shapes each have three small dots arranged in a triangle inside. The pentagon containing 3 dots in a triangular arrangement continues the same dot pattern.

152. B — Shared attribute: filled with diagonal stripes. The given shapes (square, circle, triangle) all have a diagonal stripe pattern. The pentagon filled with diagonal stripes continues the same fill type.

153. D — Shared attribute: left half shaded black. The given shapes (circle, square, triangle) each have their left half darkened and right half white. The pentagon with the left half shaded black continues the left-half shading attribute.

154. A — Shared attribute: arrow protruding inward. The given shapes each have a small arrow inside pointing inward from the perimeter. The pentagon with an arrow protruding inward continues the inward-arrow attribute.

155. B — Shared attribute: single black dot at the centre. The given shapes (circle, square, triangle) each have one small black dot at their exact centre. The pentagon with a centre dot continues the centre-dot attribute.

156. C — Shared attribute: three concentric same-shape outlines. The given figures show three nested squares, circles, and triangles. Three concentric pentagons continue the three-level nesting attribute.

157. A — Shared attribute: shape containing a curved internal line. The given shapes (square, circle, triangle) each have a curved line drawn inside. The pentagon containing a curved internal line continues the curved-line attribute.

158. C — Shared attribute: shape containing a star inscribed inside. The given shapes (circle, square, triangle) each have a star drawn inside them. The pentagon containing a star continues the inscribed-star attribute.

Section I — Paper Folding (Q159–176)

159. A — Off-fold corner hole. A hole at the upper-left corner of the folded rectangle is off the vertical fold. It mirrors across the vertical fold to the upper-right corner, giving 2 holes at the upper corners of the unfolded square.

160. D — Inner corner is on both folds. A hole at the inner corner of the small folded square sits on both vertical and horizontal fold lines simultaneously. Since the hole is on every fold, it does not duplicate, leaving one hole at the exact centre of the unfolded square.

161. B — Off-fold diagonal hole. A hole near the top of the triangle is not on the diagonal fold line. It mirrors across the diagonal to produce 2 holes symmetrically placed about the fold.

162. A — Outer-corner hole on two-fold paper. Two folds create 4 layers. A corner hole at the outer corner (off both folds) duplicates across both fold axes, producing 4 holes — one at each corner of the unfolded square.

163. D — On-fold midpoint hole. A hole punched directly on the vertical fold at its midpoint does not duplicate because both layers share the same point. The result is one hole at the centre of the unfolded square.

164. C — Two holes on horizontal fold at edge ends. Both holes are on the horizontal fold line so neither duplicates across it. Their positions in the original — left edge midpoint and right edge midpoint — give 2 holes at those locations on the unfolded square.

165. A — Two on-fold holes at different heights. Both holes are punched directly on the vertical fold line at different heights, so neither duplicates. The result is 2 holes on the vertical centre line of the unfolded square at the original heights.

166. B — Off-fold central hole on horizontal fold. The centre of the folded rectangle is not on the horizontal fold line. It mirrors vertically to give 2 holes stacked along the vertical centre line, one above and one below the horizontal centre.

167. D — Three folds, off-fold central hole. Three folds create 8 layers, and a hole not on any fold duplicates across all three axes. The result is 8 holes arranged symmetrically about the centre of the unfolded square.

168. C — On-fold midpoint hole on diagonal. A hole punched at the midpoint of the diagonal fold (which is the centre of the original square) is on the fold line. Since it does not duplicate across the fold, the result is one hole at the centre of the unfolded square.

169. A — Three off-fold holes mirror across vertical fold. Each hole on the left side of the folded rectangle is off the vertical fold and duplicates to the right side. The three originals (upper-left, lower-left, and centre) give 6 total holes — three on the left side and three mirrored on the right.

170. D — Off-fold edge hole on two-fold paper. A hole on the bottom edge of the small folded square (not on any fold) duplicates across both folds. The result is 4 holes — two on the top edge and two on the bottom edge, symmetrically placed about the vertical centre.

171. B — On-fold hole near bottom. A hole punched directly on the vertical fold near the bottom does not duplicate because both layers share the same point. The result is one hole on the vertical centre line of the unfolded square, near the bottom edge.

172. C — Off-fold right-edge hole. The hole on the right edge of the folded rectangle (vertically centred on that right edge) is off the horizontal fold. It mirrors across the horizontal fold to give 2 holes on the right edge of the unfolded square, symmetric about the horizontal centre.

173. A — On-diagonal-fold hole on three-fold paper. After three folds, the hole at the midpoint of the diagonal fold does not duplicate across the diagonal but does duplicate across both the vertical and horizontal folds. The result is 4 holes at quarter positions symmetrically placed about the centre of the unfolded square.

174. D — On-fold midpoint hole. A hole punched directly on the vertical fold at its midpoint does not duplicate because both layers share the same point. The result is one hole at the centre of the unfolded square.

175. B — Two off-fold corner holes. Both holes are at the lower corners of the folded rectangle (off the horizontal fold). Each mirrors across the fold to the corresponding upper corner, giving 4 holes at the four corners of the unfolded square.

176. C — Three corner-positioned holes on two-fold paper. The outer-corner hole (off both folds) duplicates to all 4 original corners, the hole on the vertical fold (off horizontal fold) duplicates to top-centre and bottom-centre, and the hole on the horizontal fold (off vertical fold) duplicates to left-centre and right-centre. Total: $4+2+2=8$ holes — four at corners and four at edge midpoints.