

Answer Key for Periodic Test 1
Grade 6-Mathematics

Section A (Multiple Choice Questions)

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| 1. c) right angle | 6. d) 36 |
| 2. a) Protractor | 7. b) A beam of light from a lighthouse |
| 3. d) reflex angle | 8. d) Reflex angle |
| 4. a) 100 | 9. c) 360° |
| 5. b) 32, 35, 38 | 10. b) 2 |

Section B ($5 \times 2 = 10$)

11. i) 10 O'clock: Acute angle (60°)
ii) 6 O'clock: Straight angle (180°)
12. $\angle PTR$ and $\angle QTR$
13. 3 to 6 O'clock: 90° (right angle)
14. Virahanka numbers: Fibonacci sequence. Example: 0, 1, 1, 2, 3, 5, 8
15. Cube numbers. 1, 8, 27, 64

Section C ($2 \times 3 = 6$)

16. Angles- i) 200° ii) 170°
17. (a) 1, 3, 6, 10, 15: Triangular numbers. Next: 21, 28, 36
(b) 1, 4, 9, 16, 25: Square numbers. Next: 36, 49, 64
(c) 1, 8, 27, 64, 125: Cube numbers. Next: 216, 343, 512

Section D ($2 \times 5 = 10$)

18. a) OB, OC, OE, DE (ans may vary)
b) DE (ans may vary)
c) OB, OC, OE, DE (ans may vary)
19. $\angle BXE = 115^\circ$ b) $\angle CXE = 85^\circ$ c) $\angle AXB = 65^\circ$ d) $\angle AXE = 180^\circ$ e) $\angle BXC = 30^\circ$

Section E (Case Study) ($1 \times 4 = 4$)

- (a) Rima's pattern: Triangular numbers (1, 3, 6, 10, 15...)
(b) Diva's pattern: Square numbers (1, 4, 9, 16, 25...)
(c) Rima's next two: 21, 28
(d) Diva's next: 36