

Notes for valuers

- Award step marks for correct method even if the final answer has a small arithmetic slip.
- Accept any other correct method.
- Section D: only one of (a) or (b) is to be valued.

SECTION – A**20 × 1 = 20**

1. B) 100
2. B) 1 million
3. A) three crore seven lakh fifty thousand
4. A) 4,86,000
5. B) 8
6. B) 23
7. B) 3
8. B) $\frac{7}{10}$
9. A) 0.5
10. C) 2.35 m
11. A) 0.3
12. B) ₹5p
13. A) 14
14. C) 4s
15. A) 62°
16. C) 180°
17. A) 65°
18. B) 180°
19. C) 5 cm, 6 cm, 7 cm
20. B) even

SECTION – B**4 × 2 = 8**

21. Indian: **six crore five lakh twenty thousand seven hundred** [1 + 1]
International: **60,520,700** (sixty million five hundred twenty thousand seven hundred)
22. $48 \div (6 + 2) \times 3 = 48 \div 8 \times 3 = 6 \times 3 = 18$ [1 + 1]
23. $x + 55^\circ + 70^\circ = 180^\circ$ (angle sum of a triangle), so **$x = 55^\circ$** . [1 + 1]
24. (i) 1 square – 4, 2 squares – 7, 3 squares – 10, so 4 squares need **13 matchsticks**. [1 + 1]
(ii) Each new square adds 3 sticks: **$3n + 1$**

SECTION – C

5 × 4 = 20

25. (i) $2,45,678 + 3,58,429 = 6,04,107$

[2 + 1 + 1]

(ii) $3,58,429 - 2,45,678 = 1,12,751$

(iii) 6,04,107 rounded to the nearest lakh = **6,00,000**

26. (i) **$0.06 < 0.6 < 0.606 < 0.66$**

[2 + 1 + 1]

(ii) $3.75 + 12.40 = 16.15$

(iii) $10.00 - 4.37 = 5.63$

27. (i) Perimeter = $2[(2x + 3) + x] = 2(3x + 3) = 6x + 6$ cm

[2 + 2]

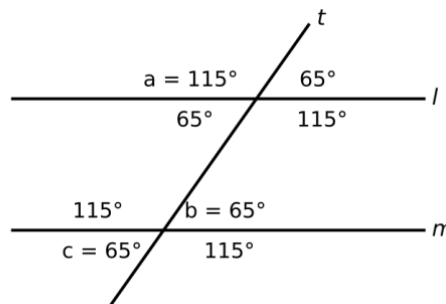
(ii) When $x = 5$: perimeter = $6 \times 5 + 6 = 36$ cm; length = 13 cm, breadth = 5 cm, area = $13 \times 5 = 65$ cm²

28. **$a = 180^\circ - 65^\circ = 115^\circ$** (linear pair)

[4]

$b = 65^\circ$ (corresponding angles, since $l \parallel m$)

$c = b = 65^\circ$ (vertically opposite angles)



29. (i) Completed magic square (each row, column and diagonal = 15):

[3 + 1]

2	7	6
9	5	1
4	3	8

(ii) The sum of an odd number of odd numbers is odd. Here five odd numbers are added, so the sum is **odd** (it is 25).

SECTION – D

4 × 8 = 32

30. a) (i) **100 lakhs** make one crore; **1000 thousands** make one million.

[2 + 4 + 2]

(ii) Total = $2,45,000 + 3,10,500 = ₹5,55,500$; increase = $3,10,500 - 2,45,000 = ₹65,500$

(iii) $4,912 \approx 5,000$ and $38 \approx 40$; estimate = $5,000 \times 40 = 2,00,000$ (exact product 1,86,656).

30. b) (i) $500 - (3 \times 45 + 20) = 500 - 155 = ₹345$

[2 each]

(ii) **$(8 + 4) \times 3 = 36$**

(iii) $15 - 12 + 3 = 6$

(iv) $25 \times 4 - 10 = 90$; $25 \times (4 - 1) = 75$; so **$25 \times 4 - 10$ is greater.**

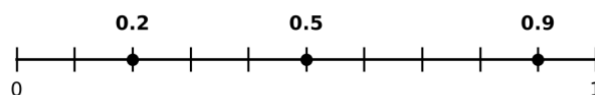
31. a) (i) **0.3, 0.45, 7.5**

[2 each]

(ii) $2.5 + 1.75 + 0.8 = 5.05$ kg

(iii) 375 paise = **₹3.75**; 1250 g = **1.25 kg**

(iv) Number line:



31. b) (i) **6a**

[2 each]

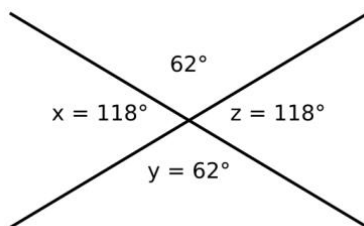
(ii) $3x + 12 - 2x = x + 12$

(iii) $2 \times 7 - 5 = 9$

(iv) (1) $4x + 7$ (2) $2r + 3$

32. a) (i) $y = 62^\circ$ (vertically opposite to 62°); $x = 180^\circ - 62^\circ = 118^\circ$ (linear pair); $z = 118^\circ$ (vertically opposite to x) [5 + 3]

(ii) Let the angles be x and $3x$: $x + 3x = 180^\circ \rightarrow x = 45^\circ$. Angles: **45° and 135°**



32. b) (i) Lines in the same plane that never meet, however far they are extended, are **parallel lines** (opposite edges of the blackboard, lines of a notebook). Lines that cross each other at a point are **intersecting lines** (the two hands of a clock, the letter X, edges meeting at a corner of the table). [4 + 4]

(ii) All the other three angles are **90°** (vertically opposite and linear pair). Such lines are called **perpendicular lines**.

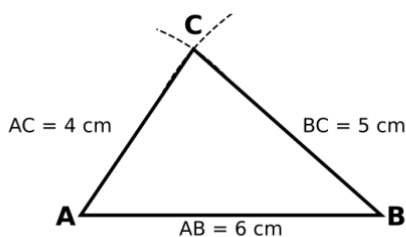
33. a) (i) $2x + 3x + 4x = 180^\circ \rightarrow 9x = 180^\circ \rightarrow x = 20^\circ$; angles **$40^\circ, 60^\circ, 80^\circ$** [3 + 2 + 3]

(ii) **No**. Two right angles already add up to 180° , leaving 0° for the third angle, which is not possible.

(iii) (1) $4 + 5 = 9 < 10$, so **no triangle**. (2) $5 + 6 > 8$, $6 + 8 > 5$, $5 + 8 > 6$, so **a triangle can be drawn**.

33. b) (i) Steps: draw $AB = 6$ cm. With A as centre and radius 4 cm draw an arc. With B as centre and radius 5 cm draw another arc cutting the first arc at C. Join AC and BC. ABC is the required triangle. [5 + 3]

(ii) By sides: equilateral (all sides equal), isosceles (two sides equal), scalene (no sides equal). By angles: acute-angled (all angles less than 90°), right-angled (one angle 90°), obtuse-angled (one angle more than 90°). One example each.



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