

Section-A

- 1) (d) non-terminating non-repeating
- 2) (d) always an irrational no.
- 3) (a) $\frac{\sqrt{7+9}}{3}$
- 4) (c) $\frac{133}{900}$
- 5) (d) $\frac{67}{190}$
- 6) (b) 20°
- 7) (b) 108°
- 8) (b) 30°
- 9) (b) 40°
- 10) (a) $30^\circ, 45^\circ$
- 11) (a) $48^\circ, 60^\circ, 72^\circ$
- 12) (a) 90°
- 13) (a) $BC = PQ$
- 14) (b) ASA
- 15) (a) SAS
- 16) (d) an equilateral Δ .
- 17) (d) all the 3 altitudes are equal.
- 18) (c) 50°
- 19) (a) 0°
- 20) (d) II & IV quadrants

SECTION-B

- 21) (b) 2nd quadrant.
- 22) (a) in the negative direction of the x-axis.
- 23) (b) (0, 4)
- 24) (d) y-coordinate = 5 or -5
- 25) (b) 13 cm
- 26) (a) $\sqrt{32}$ cm

- 27 (c) 3:4
- 28 (a) 1322 cm^2
- 29 (b) Rs. 2.16
- 30 (c) $24\sqrt{5}$
- 31 (a) $a \neq 0, b \neq 0$
- 32 (c) infinitely many solutions
- 33 (a) natural nos.
- 34 (a) 4
- 35 (d) (0, 2)
- 36 (b) $y = 0$
- 37 (b) 20-30
- 38 (a) 11-20
- 39 (c) 5-8
- 40 (d) raw data

Case study \Rightarrow based-1:

- 41 (i) $3x = y$
- 42 (i) (4, 1)
- 43 (ii) 95
- 44 (i) infinitely many solns.

45 $4x + 2y - k = 0$
 $4x(-1) + 2 \times 3 - k = 0$
 $-4 + 6 = k = 0$
 $\Rightarrow k = 2$

(iii) 2.

Case study \Rightarrow Based-2:-

- 46 (b) 9
- 47 (a) 2180
- 48 $\frac{190+181}{2} = \frac{371}{2}$
- 49 (d) 28
- 50 (d) 31
- (c) 185.5 $= \frac{371}{2}$

Handwritten calculations for question 48:

$$\frac{190+181}{2} = \frac{371}{2}$$

$$\frac{371}{2} = 185.5$$

Long division for $\frac{371}{2}$:

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    185.5
  2 | 371.0
    340
    ---
     310
     300
     ---
      100
      100
      ---
        0
  
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