# SSLC 2022 MARCH

(1) $d = 7-3 = 4$ //

(2) $70°$ //

(3) 7W, 3B $P(B) = \frac{3}{10} = 0.3$ //

(4) distance $(0,0), (4,0) = 4$ //

(5) $90°$, 12 B Radius $= \frac{12}{4} = 3$ //

(6) $P(\cup) = 0$ //

(7) $\frac{1}{\sqrt{3}}$ //

(8) 24 // $A = r \cdot s$

(9) $10\sqrt{3}$ //

(10) 1 //

(11) (a) 62 //

(b) $3n+2$ //

(12) (a) 25 //

(b) $\frac{1}{2}$ //

(13) (a) $3\sqrt{3}$ //

(b) 3 //

(14) $x(x+1)$ //

(15) 42 //

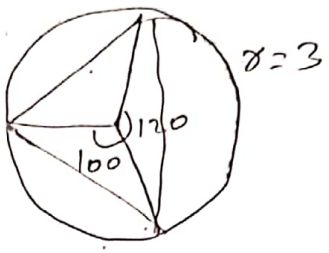
(16) (a) 2 //

(b) 110 //

(17) $PC = 6$

(18) (5, 4)

(19)

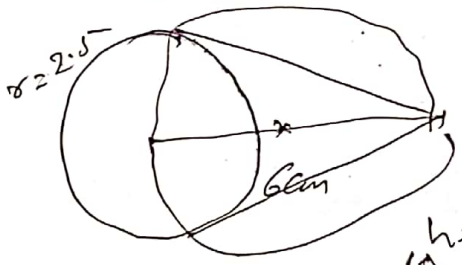



(20) (a) $x+4$ //

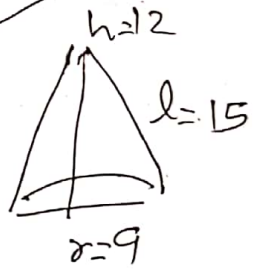
(b) $x(x+4) = 77$ //

$x = 7$ //

(21)




(22) $216\pi\ cm^2$ //




(23)

(a) C (10, 8) //

(b) (6, 5) //

(24)

| | |
|---|---|
| 1, 2 | 5 6 |
| 3 4 | 7 8 |
| | 9 |

(a) $4 \times 5 = 20$ //

(b) $\frac{2 \times 3}{20} = \frac{6}{20} = \frac{3}{10}$ //

(c) (1, 9), (2, 8), (3, 7), (4, 6)

$= \frac{4}{20} = \frac{1}{5}$ //

(25)

(a) $\sin 40 = \frac{h}{10}$

$h = 10 \times .64 = 6.4$ //

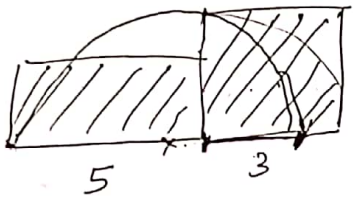
(b) $20 \times 6.4 = 128$ //

(26)

(a) $PC^2 = 8 \times 2$

$PC = 4$ //

(b)




(27) $\angle ADC = 90°$

(b) $AB = 10$

$BC = 10\sqrt{3}$ $\left(\frac{20}{\sqrt{2}} = 10\sqrt{2}\right)$

$AD = 10\sqrt{2}$

$DC = 10\sqrt{2}$

$P = 10(2\sqrt{2} + \sqrt{3} + 1)$ //

(28)

(a) $B(7,1)$, $D(2,5)$

(b) $l = 5$ //

$b = 4$ //

(c) $\sqrt{41}$ //

(29)

(a) $V = 288\pi \text{ cm}^3$ //

(b) $h = 24$ cm //

(30)

(a) $x(x+5)$

(b) $x(x+5) = 104$

$x^2 + 5x - 104 = 0$

$b^2 - 4ac =$

$= 25 + 416 = 441$, $21 \times 21$

$x = \frac{-5 \pm 21}{2} = \frac{16}{2}, 8, 13$

$8, 13$

(31)

(a) $P(1) = 3$ //

(b) $(2x-1)$ //

(c) $(x-1)(x-2)$ //

Solutions

$x = 1$, $x = 2$

(32)

(a) 23rd threshold.

(b) 161 //

(c) 167 //

(33)

(a) 510 //

(b) 60 //

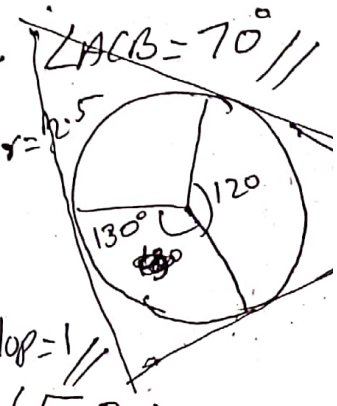
(c) $15 \times 60 = 900$ //

(34) $\angle OAC = 90°$ //

$\angle ACB = 70°$ //

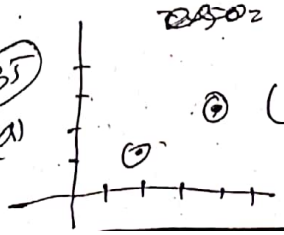
$180 - 50 = 130$

$180 - 60 = 120$




(35)

(a)



(b) slope = 1 //

(c) (5, 2) //