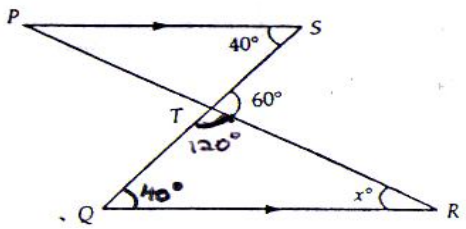
PMR MATHEMATICS – ASSESSMENT 1 [ANSWERS]

1)



$\therefore x° = 180° - 120° - 40°$
$= 20°$……..(A)

2) $180° - (50° + 50°)$
$= 180° - 100°$
$= 80°$

$P = 300° - (130° + 30° + 80°)$
$= 360° - (240°)$
$= 120°$.....(C)

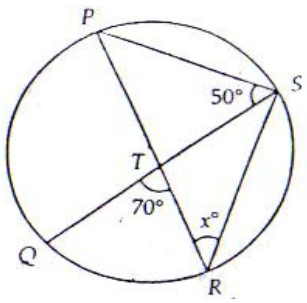
3) $j + k + l + m + n$
$= 45° + 45° + 45° + 90°$
$= 90° + 90° + 90°$
$= 180° + 90°$
$= 270°$……..(B)

4) $\angle RST = \dfrac{[(6-2)x180°]}{6} = 120°$

$\angle RSQ = \angle UST = \dfrac{(180° - 120°)}{3} = 30°$

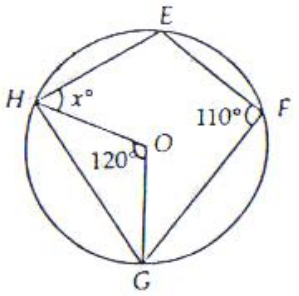
$\therefore x = 120° - (30° + 30°)$
$= 120° - (60°)$
$= 60$.....(B)

5)



$\angle STR = 180° - 70° = 110°$
$\angle TSR = 90° - 50° = 40°$
$\therefore x = 180° - (110° + 40°)$
$= 30°$.....(D)

6)



$\angle GHO = \angle HGO$
$= (180° - 120°) \div 2 = 30°$
$x = 180° - (110° + 30°)$
$= 180° - (140°)$
$= 40°$.....(C)

7) $OS = OR = \sqrt{RT^2 + OT^2}$
$= \sqrt{12^2 + \left(\dfrac{10}{2}\right)^2}$
$= \sqrt{144 + 25}$
$= \sqrt{169} = 13cm$
$\therefore TS = OS - OT$
$= 13 - 5$
$= 8cm$……..(A)

8) $STQ = \dfrac{3}{4}\left(2 \times \dfrac{22}{7} \times 14\right)$
$= \dfrac{3}{4} \times 88 = 66cm$

$\therefore Perimeter = 66 + 14 + 14$
$= 94$cm.……(B)

9) Median = 4,4,**5**,8,9,
= 5……..(B)

10) $\therefore$ Nov + Dec
$= (7 + 5) \times 5 = 60$.....(C)

11) $\frac{120}{360} = \frac{1}{3}$.....(*A*)

12) $6pq + 10qr$
$= 2q(3p+5r)$…….(C)

13) $(x + 2y)(2x-5y)$
$= 2x^2 - xy - 10y^2$
$= 2x^2 + [-xy] - 10y^2$

$\therefore$ [ ] is $-xy$ ……(A)

14) P =(-3) , R =(-1)
$\frac{P^2}{R}(6-P)$
$= \frac{(-3)^2}{(-1)}(6-(-3))$
$= \frac{9}{-1}(6+3)$
$= -9(9)$
$= -81$.....(*A*)

15) $y = x + \frac{1}{2}x + (x-4)$
$y = x + \frac{1}{2}x + x - 4$
$y = \frac{2x + x + 2x}{2} - 4$
$y = \frac{5x}{2} - 4$.....(*D*)

16) $\frac{2}{3x} - \frac{x-1}{6x} = \frac{4-(x-1)}{6x}$
$= \frac{4-x+1}{6x}$
$= \frac{5-x}{6x}$.....(*C*)