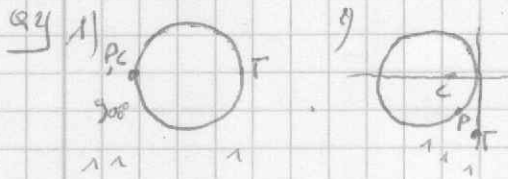


Q1) 1) centre, radius, circumference

2) ord prop circle on line.

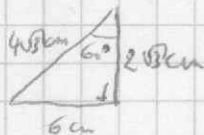


Q4) $72^\circ, -72^\circ, 108^\circ, -108^\circ$
 $200^\circ, 160^\circ, -20^\circ, 20^\circ$

Q5) $110^\circ, 30^\circ, -1/2, \sqrt{3}/2, +\sqrt{3}/3$
 $4950^\circ, -90^\circ, -1, 0, X$

Q6) CE: $C = \frac{1}{2} \{ \pm 60^\circ \} = S$
 CE: $\pm 12^\circ, T = -1 \{ -15^\circ, 135^\circ \} = S$

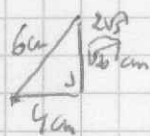
Q7) 1)



$$A = 12\sqrt{3} \text{ cm}^2 \quad \approx 20,78 \text{ cm}^2$$

$$p = (12 + 8\sqrt{3}) \text{ cm} = 4(3 + 2\sqrt{3}) \text{ cm} \quad \approx 25,86 \text{ cm}$$

2)



$$\beta = \gamma = \arccos\left(\frac{2}{3}\right) \quad \approx 48,19^\circ$$

$$\alpha = 2 \arcsin\left(\frac{2}{3}\right) \quad \approx 83,62^\circ$$

$$p = 20 \text{ cm}$$

$$A = 8\sqrt{3} \text{ cm}^2 \quad \approx 13,86 \text{ cm}^2$$

$$3) v = \frac{d}{t} = \frac{400 \text{ m}}{132 \text{ s}} = \frac{400}{132} \cdot 3,6 \text{ km/h} \approx 10,91 \text{ km/h}$$

$$\theta = \frac{60}{132} \cdot 360^\circ \approx 163,6^\circ$$