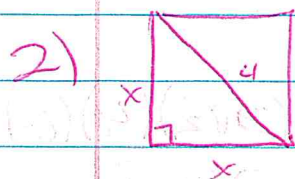


P.471

1) $d=10, r=5 \quad A=\pi(5)^2$
 $=25\pi \text{ u}^2$



$45-45-90 \triangle$

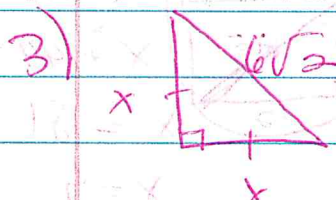
$\text{hyp} = \text{leg}\sqrt{2}$

$4 = x\sqrt{2}$

$\frac{4\sqrt{2}}{2} = x$

$2\sqrt{2} = x$

$A = (2\sqrt{2})^2$
 $= 8 \text{ cm}^2$



$x\sqrt{2} = 6\sqrt{2}$

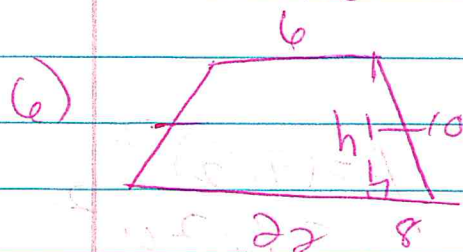
$x = 6$

$A = \frac{1}{2}(6)(6)$
 $= 18 \text{ u}^2$

4) $30\pi = \pi d$
 $30 = d$
 $15 = r$

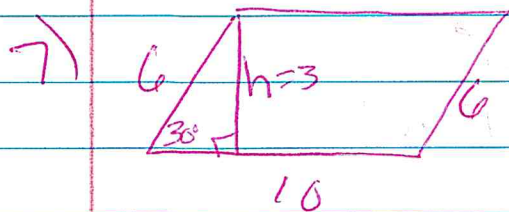
$A = \pi(15)^2$
 $= 225\pi \text{ m}^2$

5) $A = \frac{1}{2}d_1 \cdot d_2$
 $A = \frac{1}{2}(5)(4)$
 $= 10 \text{ u}^2$

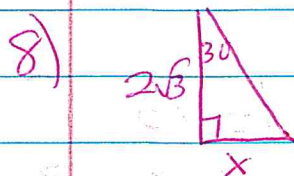


$h = 6 \text{ (6, 8, 10)}$

$A = \frac{1}{2}(6)(6+22)$
 $= 84 \text{ u}^2$



$$A = (10)(3) = 30 \text{ u}^2$$



$$\begin{aligned} LL &= SLV\sqrt{3} \\ 2\sqrt{3} &= x\sqrt{3} \\ 2 &= x \\ S &= 4 \end{aligned}$$

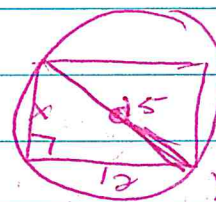
$$A = \frac{1}{2}(2\sqrt{3})(4)(6) = 24\sqrt{3} \text{ cm}^2$$

9) $A = \frac{45}{360} \cdot \pi (4)^2$

$$A = \frac{1}{8} \cdot 16\pi$$

$$= 2\pi \text{ u}^2$$

10)



$$\begin{aligned} x^2 + 12^2 &= 15^2 \\ x^2 + 144 &= 225 \\ x^2 &= 81 \\ x &= 9 \end{aligned}$$

$$A = 9(12) = 108 \text{ u}^2$$

11) $10\pi = \frac{x}{360} \cdot 2\pi (12)$

$$10 = \frac{24x}{360} \cdot 360$$

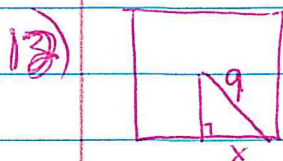
$$3600 = 24x$$

$$150 = x$$

$$A = \frac{150}{360} \cdot \pi (12)^2$$

$$= \frac{5}{12} \cdot 144 \cdot \pi$$

$$= 60\pi \text{ u}^2$$



$$\text{hyp} = \text{leg}\sqrt{2}$$

$$9 = x\sqrt{2}$$

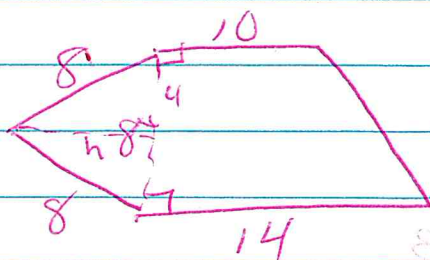
$$9\sqrt{2} = x$$

$$s = 9\sqrt{2}$$

$$A = (9\sqrt{2})^2 = 162 \text{ u}^2$$

P. 471

13)



$$A_{\Delta} = \frac{1}{2} (8) (4\sqrt{3})$$

$$= 16\sqrt{3}$$

$$h^2 + 4^2 = 8^2$$

$$h^2 + 16 = 64$$

$$h^2 = 48$$

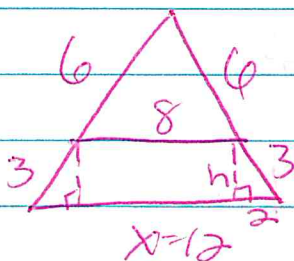
$$h = 4\sqrt{3}$$

$$A_{\text{Trap}} = \frac{1}{2} (8) (10 + 14)$$

$$= 96$$

$$A_{\text{Shaded}} = 96 + 16\sqrt{3}$$

14)



$$\frac{6}{9} = \frac{8}{x}$$

$$\frac{2}{3} = \frac{8}{x}$$

$$x = 12$$

$$h^2 + 2^2 = 3^2$$

$$h^2 + 4 = 9$$

$$h^2 = 5$$

$$h = \sqrt{5}$$

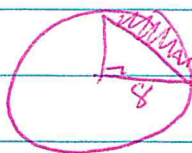
$$\frac{12 \cdot 8}{2} = 48$$

$$2x = 24$$

$$A_{\text{Shade}} = \frac{1}{2} (\sqrt{5}) (8 \cdot \frac{1}{2})$$

$$= 10\sqrt{5} \text{ u}^2$$

15)



$$A_{\text{Shade}} = A_{\text{Sect}} - A_{\Delta}$$

$$A_{\text{Sect}} = \frac{90}{360} \pi (8)^2$$

$$= \frac{1}{4} \cdot 64\pi$$

$$= 16\pi$$

$$A_{\Delta} = \frac{1}{2} (8) (8)$$

$$= 32$$

$$A_{\text{Shaded}} = 16\pi - 32 \text{ u}^2$$

$$16) \frac{100\pi}{36\pi} = \frac{25}{9}$$

$$\sqrt{\frac{25}{9}} = \frac{5}{3}$$

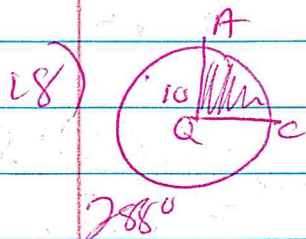
$$\text{ratio of radii} = \frac{5}{3}$$

$$\text{ratio of circ} = \frac{5}{3}$$

$$17) \frac{14}{\frac{7}{2}} = 14 \times \frac{2}{7}$$

$$= \frac{4}{1} \text{ Scale factor}$$

$$\text{ratio of Areas} = 16:1$$



$$a) C = 2\pi(10)$$

$$= 20\pi \text{ u}$$

$$b) \frac{72 \cdot 20\pi}{360}$$

$$\frac{1}{5} \cdot 20\pi = 4\pi \text{ u}$$

$$c) \frac{1}{5} \pi (10)^2$$

$$\frac{100\pi}{5} = 20\pi \text{ u}^2$$

$$19) 3:7$$

$$A \quad 3 \quad 4 \quad D$$

$$20) a) \frac{6}{12} = \frac{1}{2}$$

$$b) 2:7$$