

Key

P.621

42) // ogram area = $15 \cdot 21 = 315$

Δ area = $\frac{1}{2}(21)(20) = 210$

$\underline{525 \text{ cm}^2}$

P.655

31) $180 - 60 = 120^\circ$ for line

πr or $2\pi r$

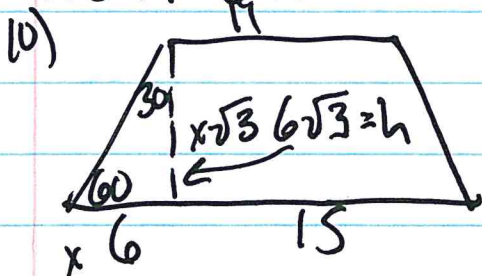
$\frac{120}{360} (24)\pi = \frac{1}{3} \cdot 24 \cdot \pi = \underline{8\pi \text{ ft}}$

P.671

8) $CH = 5$
 $AK = 10$

$5/10 = \underline{\frac{1}{2}}$

P.677-680



$b_1 = 11$
 $b_2 = 21$
 $h = 6\sqrt{3}$

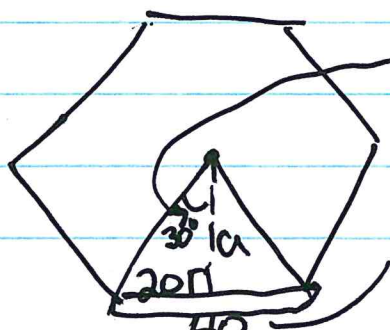
$\frac{1}{2}(6\sqrt{3})(11+21)$
 $\underline{96\sqrt{3} \text{ mm}^2}$

12) $d_1 = 6.5 + 6.5 = 13$

$d_2 = 10 + 8 = 18$

$\frac{1}{2}(13)(18) = \underline{117 \text{ cm}^2}$

11)



$360 \div 6 = 60/2 = 30^\circ$

$a = 20\sqrt{3}$

or

$\tan 30 = \frac{20}{a}$ and solve

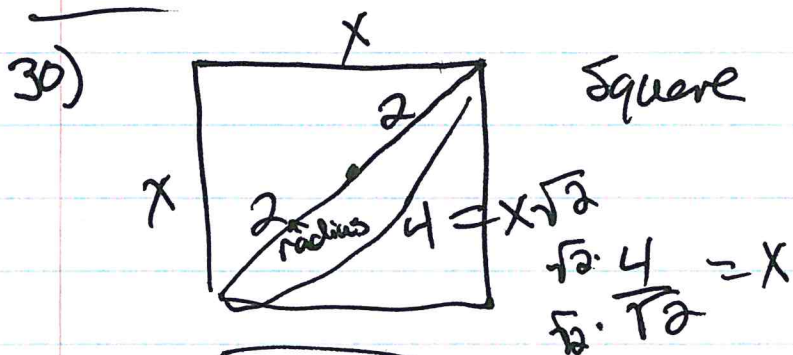
$240 \div 6 = 40$

$$a = 20\sqrt{3}$$

$$P = 240$$

$$A = \frac{1}{2} Pa$$

$$\frac{1}{2}(240)(20\sqrt{3}) = 2400\sqrt{3} \text{ cm}^2$$

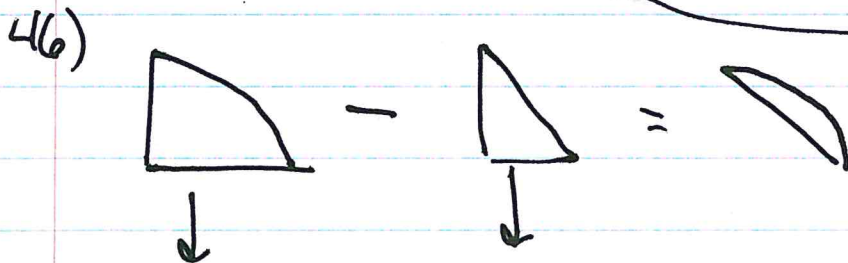


43) $\pi(12)^2 = 144\pi \text{ in}^2$

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

$$A = s^2$$

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



$$\frac{90}{360} \pi (8)^2 \quad \frac{1}{2}(8)(8)$$

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

$$16\pi - 32 = 18.3 \text{ cm}^2$$

P. 747

24) A) $4:10 = 2:5$

B) $2^2:5^2 = 4:25$

C) $2^3:5^3 = 8:125$

P. 755

9) $V = \frac{4}{3} \pi r^3$

$$\frac{4}{3} \pi (4)^3 = 268.1 \text{ ft}^3$$

$$A = 4\pi r^2$$

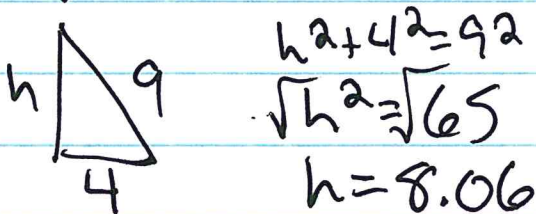
$$= 4\pi (4)^2 = 201.1 \text{ ft}^2$$

10) $V = \frac{1}{3} bh$

$$b = 8 \cdot 8 = 64$$

$$\frac{1}{3} (64)(8.06) = 172 \text{ in}^3$$

$$h = 8.06$$



$$SA = B + \frac{1}{2} Pl$$

$$B = 64$$

$$p = 4 \cdot 8 = 32$$

$$l = 9$$

$$64 + \frac{1}{2} (32)(9) = 208 \text{ in}^2$$

11) $V = 4 \cdot 5 \cdot 11 = 220 \text{ cm}^3$

$$A = 4 \cdot 11 \cdot 2 + 5 \cdot 11 \cdot 2 + 4 \cdot 5 \cdot 2 = 238 \text{ cm}^2$$

12) $V = \frac{1}{3} Bh = \frac{1}{3} \pi r^2 h$

$$\frac{1}{3} \pi (5)^2 (6) = 157.1 \text{ m}^3$$

$$SA = B + \frac{1}{2} Pl$$

$$\pi r^2 + \pi r l$$

$$\pi (5)^2 + \pi (5)(6) = 201.2 \text{ m}^2$$

13) $V = Bh = \pi r^2 h$

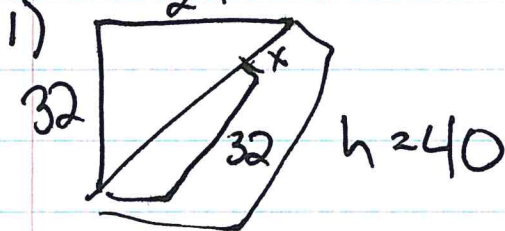
$$\pi(3)^2(8) = 226.2 \text{ cm}^2$$

$$A = 2B + Ph$$

$$2\pi r^2 + 2\pi r h$$

$$2\pi(3)^2 + 2\pi(3)(8) = 207.3 \text{ cm}^2$$

P. 815 24



$$24^2 + 32^2 = h^2$$

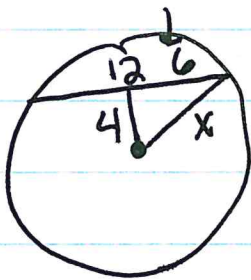
$$\sqrt{1600} = h^2$$

$$40 = 40 \text{ h}$$

$$-32$$

$$\frac{-32}{8} = x$$

2)



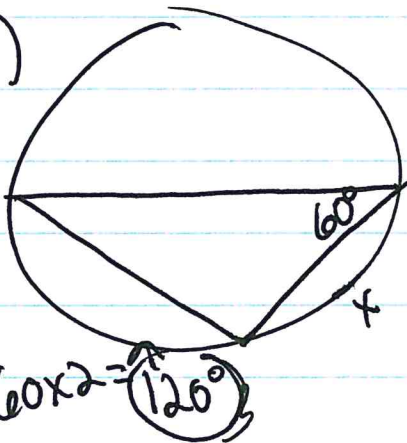
$$4^2 + 6^2 = x^2$$

$$16 + 36 = x^2$$

$$\sqrt{52} = \sqrt{x^2}$$

$$7.2 = x$$

3)



$$180 - 120 = 60 = x$$

$$4) 3 \cdot 7 = 2 \cdot x$$

$$21 = 2x$$

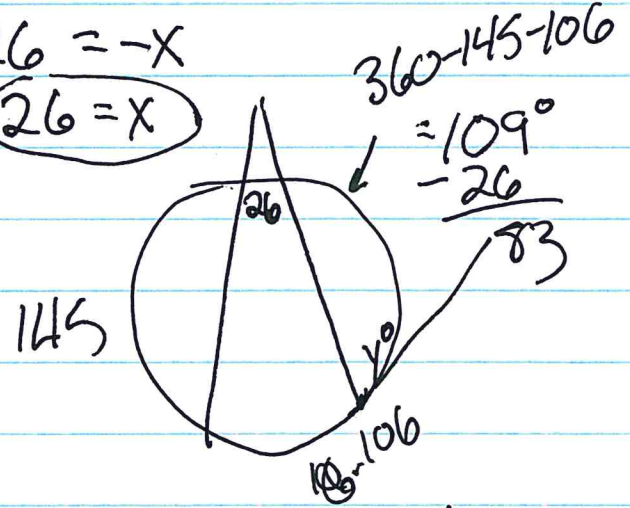
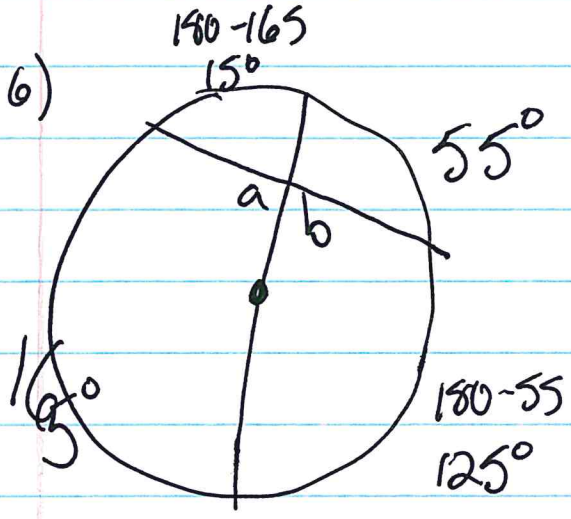
$$10.5 = x$$

$$5) 40 = \frac{1}{2}(106 - x)$$

$$80 = 106 - x$$

$$-26 = -x$$

$$\boxed{26 = x}$$



$$b^\circ = \frac{1}{2}(15 + 125)$$

$$= 70^\circ$$

$$a = \frac{1}{2}(55 + 165)$$

$$= 110^\circ$$

$$y = \frac{1}{2}(\text{arc length})$$

$$= \frac{1}{2}(83) = 41.5$$

$$7) 10(30) = 12(12 + x)$$

$$300 = 144 + 12x$$

$$156 = 12x$$

$$\boxed{13 = x}$$

$$8) 4(16) = x^2$$

$$64 = x^2$$

$$\boxed{8 = x}$$