

Ch. 10 Review

1) $\frac{15}{60} \cdot 360 = \boxed{90^\circ}$

2) $m\angle 1 = 86^\circ$
 $m\angle 2 = 59^\circ$
 $m\angle 3 = 94^\circ$
 $m\angle 4 = 59^\circ$

3) $3x + 20 + 2x + 55 = 180$
 $5x + 75 = 180$
 $5x = 105$
 $x = 21$

4) $x + 40 + 4x - 10 = 90$

$5x + 30 = 90$
 $5x = 60$
 $x = 12$

$12 + 40 = \boxed{52^\circ}$
 $4(12) - 10 = \boxed{38^\circ}$

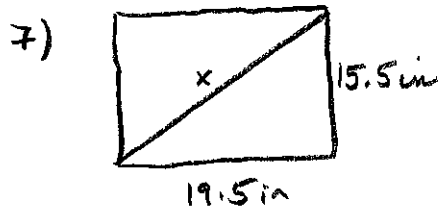
5) $m\angle 1 = 137^\circ$
 $m\angle 2 = 43^\circ$
 $m\angle 3 = 43^\circ$
 $m\angle 4 = 137^\circ$
 $m\angle 5 = 137^\circ$
 $m\angle 6 = 43^\circ$
 $m\angle 7 = 43^\circ$
 $m\angle 8 = 137^\circ$

$3(21) + 20 = \boxed{83^\circ}$
 $2(21) + 55 = \boxed{97^\circ}$

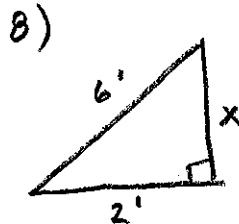
6) $x + 4x + 45 + x = 180$

$6x + 45 = 180$
 $6x = 135$
 $x = \boxed{22.5^\circ}$

$22.5(4) = \boxed{90^\circ}$
 $22.5 + 45 = \boxed{67.5^\circ}$

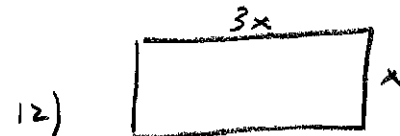


$15.5^2 + 19.5^2 = x^2$
 $620.5 = x^2$
 $x = \boxed{24.910 \text{ m}}$



$2^2 + x^2 = 6^2$
 $4 + x^2 = 36$
 $x^2 = 32$
 $x = \boxed{5.657 \text{ ft}}$

9) $(6-2)180 = \frac{720}{6} = 120$
 $(4)180 = 720$
 $180 - 120 = \boxed{60^\circ}$



$2(3x) + 2x = 600$
 $6x + 2x = 600$

10) $(7-2)180 = (5)180 = \boxed{900^\circ}$

11) $10(2) + 25(2) = 20 + 50 = \boxed{70 \text{ ft}}$

$8x = 600$ width
 $x = \boxed{75 \text{ yds}}$
 $75(3) = \boxed{225 \text{ yds}}$ length

13) a) $15(18) + \frac{1}{2}(18)(10) = 270 + 90 = \boxed{360 \text{ m}^2}$

b) $\frac{1}{2}(42)(22+48) = 21(70) = 1470 \text{ cm}^2$
 $\pi(11)^2 = 121\pi \text{ cm}^2$
 $1470 - 121\pi \text{ cm}^2 = \boxed{1089.867 \text{ cm}^2}$

c) $30(33) = \boxed{990 \text{ ft}^2}$

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$$14) C = 15\pi \text{ ft} = 47.1238\dots \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}} = 565.486\dots \text{ in} \times \frac{\$.25}{1 \text{ in}} = \boxed{\$ 141.37}$$

$$15) a) \pi(4)^2(18) = \boxed{904.779 \text{ m}^3}$$

$$b) 12(10)(14) = \boxed{1680 \text{ m}^3}$$

$$c) \frac{4}{3}\pi(15)^3 = \boxed{14,137.167 \text{ m}^3}$$

$$d) \frac{1}{3}(8.5)(6) = \boxed{80 \text{ m}^3}$$

$$e) \frac{1}{3}\pi(6)^2(12) = 144\pi = \boxed{452.389 \text{ m}^3}$$

$$f) \frac{\frac{4}{3}\pi(3)^3}{2} = \frac{36\pi}{2} = 18\pi = \boxed{56.549 \text{ m}^3}$$