

# GEOMETRY (SECTION 3.5)

9.  $\angle 1 = 180 - 117 - 33$

$m\angle 1 = 30$

11.  $\angle 1 = 180 - 57 - 33$

$\angle 1 = 90$

10.  $\angle 1 = 180 - 52.2 - 44.7$

$\angle 1 = 83.1$

12.  $x = 180 - 80 - 30$

$x = 70$

$y = 180 - 70$

$y = 110$

$z = 180 - 40 - 110$

$z = 30$

13.  $x = 180 - 70 - 30$

$x = 80$

$y = 80$

14.  $C = 180 - 90 - 30$

$C = 60$

15. (A)  $\angle 5, \angle 6, \angle 8$

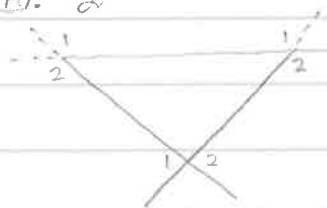
(B)  $\angle 5 : \angle 1, \angle 3$

$\angle 6 : \angle 1, \angle 2$

$\angle 8 : \angle 1, \angle 2$

(C)  $\angle 6 \cong \angle 8$

16. (A) 2



(B) 6

17.  $\angle 1 = 60 + 63$

$= 123$

18.  $128.5 = \angle 2 + 13$

$\angle 2 = 115.5$

19.  $\angle 3 = 45 + 47$

$\angle 3 = 92$

$\angle 4 = 180 - 92$

$\angle 4 = 88$

29.  $x + 2x - 9 + 2x + 4 = 180$

$5x - 5 = 180$

$5x = 185$

$x = 37$

$m\angle R = 37$

$m\angle P = 2(37) - 9 = 65$

$m\angle Q = 2(37) + 4 = 78$

30.  $8x - 1 + 4x + 7 + 90 = 180$

$$12x + 96 = 180$$

$$12x = 84$$

$$x = 7$$

$$m\angle C = 90$$

$$m\angle B = 8(7) - 1 = 55$$

$$m\angle A = 4(7) + 7 = 35$$

31.  $b = 90 - 3a$

$$b = 58$$

$$a = 180 - 58 - 55$$

$$a = 67$$

$$c = 180 - 55$$

$$c = 125$$

$$d = 180 - 3a - 125$$

$$d = 23$$

$$e = 90$$

32.  $y = 180 - 90 - 54$

$$y = 36$$

$$z = 90$$

$$x = 180 - 90 - 52$$

$$x = 38$$