

Transversals – Parallel Lines and Triangles

Hw Section 3.4

Name _____

Find the measure of each angle indicated.

1)

$$x + 20 + 130 = 180$$

$$x + 150 = 180$$

$$x = 30$$

2)

$$x + 25 + 120 = 180$$

$$x + 145 = 180$$

$$x = 35$$

3)

$$x + 35 + 80 = 180$$

$$x + 115 = 180$$

$$x = 65$$

4)

$$x + 60 + 60 = 180$$

$$x + 120 = 180$$

$$x = 60$$

Directions: Solve for x.

5)

$$(4x + 3) + (73) + (64) = 180$$

$$4x + 140 = 180$$

$$4x = 40$$

$$x = 10$$

6)

$$(25) + (140) + (2x + 3) = 180$$

$$2x + 168 = 180$$

$$2x = 12$$

$$x = 6$$

7)

$$(x + 27) + (70) + (90) = 180$$

$$x + 187 = 180$$

$$x = -7$$

Directions: Find the measure of each angle indicated.

8)

$$113 = 55 + m\angle C$$

$$58 = m\angle C$$

9)

$$136 = 62 + m\angle T$$

$$74 = m\angle T$$

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10)

$153 = m\angle FED + 133$
 $20 = m\angle FED$

11)

$87 = m\angle FHG + 23$
 $64 = m\angle FHG$

Directions: Solve for x.

12)

$118 = (15 + 5x) + (5x - 7)$
 $118 = 10x + 8$
 $110 = 10x$
 $11 = x$

13)

$12x + 8 = (8x + 8) + (20)$
 $12x + 8 = 8x + 28$
 $4x + 8 = 28$
 $4x = 20$
 $x = 5$

14)

$26x + 6 = (7x + 2) + (80)$
 $26x + 6 = 7x + 82$
 $19x + 6 = 82$
 $19x = 76$
 $x = 4$

Directions: Find the measure of each angle.

15)

$55 + 75 + x = 180$
 $130 + x = 180$
 $x = 50$

$50 + 60 + y = 180$
 $110 + y = 180$
 $y = 70$

$70 + 55 + z = 180$
 $125 + z = 180$
 $z = 55$

16)

$x + 55 + 90 = 180$
 $x + 145 = 180$
 $x = 35$

$35 + y = 90$
 $y = 55$

$z + 55 + 35 = 180$
 $z + 90 = 180$
 $z = 90$

Algebra Review

Solve: $7y - 18 = -4$

$7y = 14$
 $y = 2$

Solve: $5h - 2 = 2h + 10$

$3h - 2 = 10$
 $3h = 12$
 $h = 4$

Multiply: $2x^2(3x^3 + 8x)$

$= 6x^5 + 16x^3$