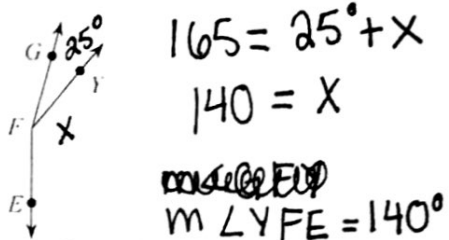
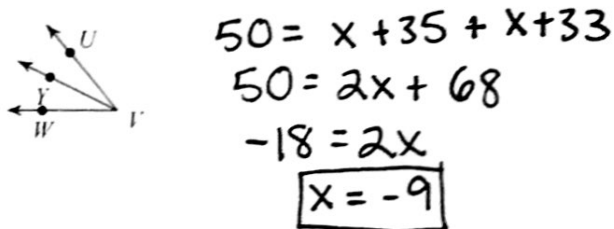


Unit 1 Review (1.1 - 1.5)

- 1) Find $m\angle YFE$ if $m\angle GFE = 165^\circ$ and $m\angle GFY = 25^\circ$.

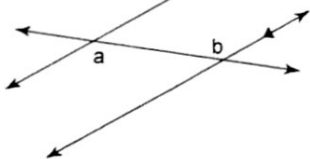


- 2) $m\angle WVU = 50^\circ$, $m\angle WYV = x + 35$, and $m\angle YVU = x + 33$. Find x .

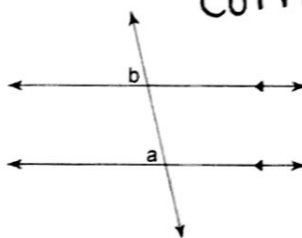


Name the relationship: complementary, linear pair, vertical, alternate interior, corresponding, or alternate exterior.

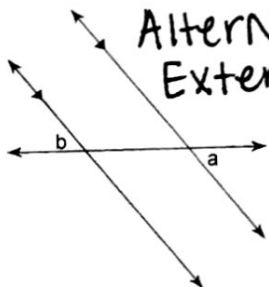
- 3) Alternate Interior



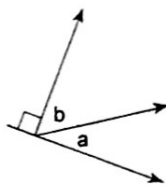
- 4) corresponding



- 5) Alternate Exterior



- 6) Complementary



Find the measure of angle b.

- 7) $180 - 142 = b$
 $38^\circ = b$

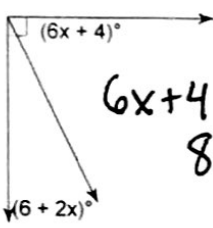
- 8) $b = 40^\circ$

- 9) $b + 55 = 90$
 $b = 35^\circ$

- 10) $b = 134^\circ$

Find the value of x.

11)



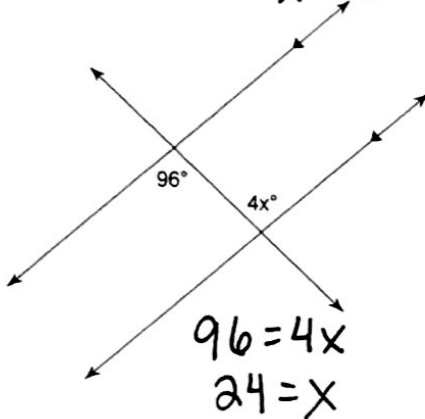
$$6x + 4 + 6 + 2x = 90$$

$$8x + 10 = 90$$

$$8x = 80$$

$$x = 10$$

13)



$$96 = 4x$$

$$24 = x$$

15) One of two supplementary angles is 68° greater than its supplement. Find the measure of both angles.

$$x + x + 68 = 180$$

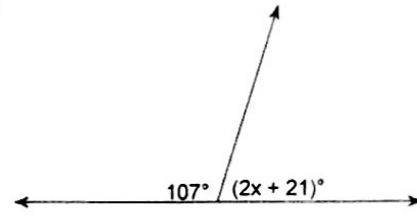
$$2x + 68 = 180$$

$$2x = 112$$

$$x = 56$$

$$x + 68 = 56 + 68 = 124$$

12)



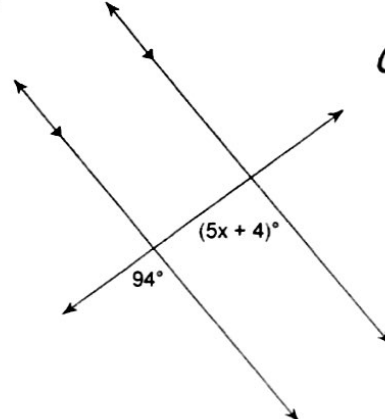
$$107 + 2x + 21 = 180$$

$$128 + 2x = 180$$

$$2x = 52$$

$$x = 26$$

14)



$$94 = 5x + 4$$

$$90 = 5x$$

$$18 = x$$

16) ∠1 and ∠2 are complementary angles. Solve for x and the measure of both angles.

$$\angle 1 = 2x - 16$$

$$\angle 2 = 5x + 1$$

$$2x - 16 + 5x + 1 = 90$$

$$7x - 15 = 90$$

$$7x = 105$$

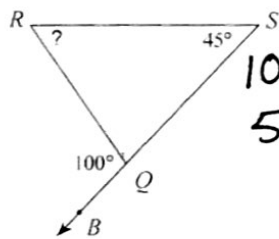
$$x = 15$$

$$\angle 1 = 2(15) - 16 = 14$$

$$\angle 2 = 5(15) + 1 = 76$$

Find the measure of each angle indicated.

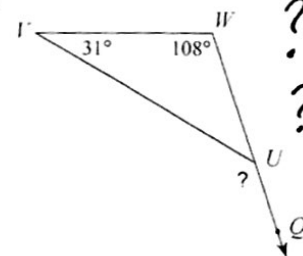
17)



$$100 = 45 + ?$$

$$55 = ?$$

18)

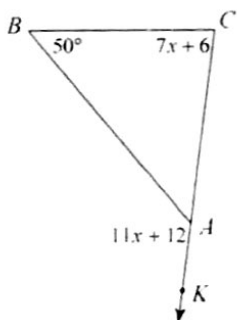


$$? = 108 + 31$$

$$? = 139$$

Solve for x.

19)



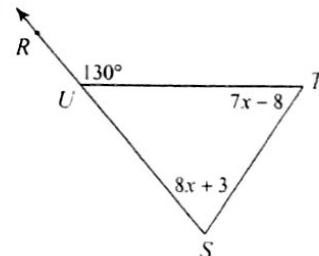
$$11x + 12 = 50 + 7x + 6$$

$$11x + 12 = 56 + 7x$$

$$4x = 44$$

$$x = 11$$

20)



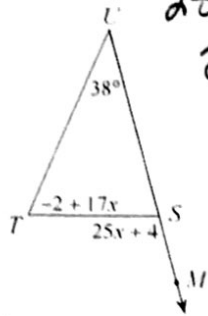
$$130 = 7x - 8 + 8x + 3$$

$$130 = 15x - 5$$

$$135 = 15x$$

$$9 = x$$

21)



$$25x + 4 = -2 + 17x + 38$$

$$25x + 4 = 36 + 17x$$

$$8x = 32$$

$$x = 4$$

Find the value of x .

23)

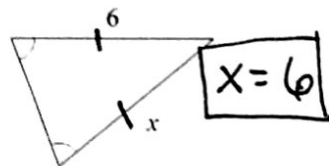


$$x + x + 112 = 180$$

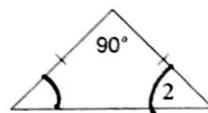
$$2x = 68$$

$$x = 34^\circ$$

25)



$$x = 6$$

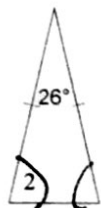
27) $m\angle 2 = x + 51$ 

$$90 + x + 51 + x + 51 = 180$$

$$2x + 192 = 180$$

$$2x = -12$$

$$x = -6$$

29) $m\angle 2 = 12x - 7$ 

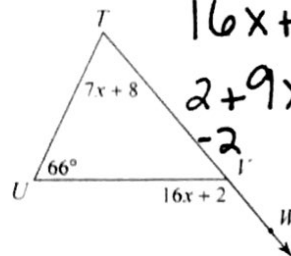
$$12x - 7 + 12x - 7 + 26 = 180$$

$$24x + 12 = 180$$

$$24x = 168$$

$$x = 7$$

22)



$$16x + 2 = 66 + 7x + 8$$

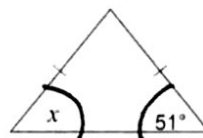
$$2 + 9x = 74$$

$$-2 \quad -2$$

$$9x = 72$$

$$x = 8$$

24)

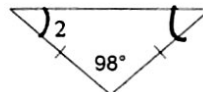


$$x = 51^\circ$$

26)



$$11 = x$$

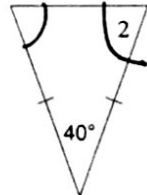
28) $m\angle 2 = 3x + 8$ 

$$3x + 8 + 3x + 8 + 98 = 180$$

$$6x + 114 = 180$$

$$6x = 66$$

$$x = 11$$

30) $m\angle 2 = 10x$ 

$$10x + 10x + 40 = 180$$

$$20x = 140$$

$$x = 7$$