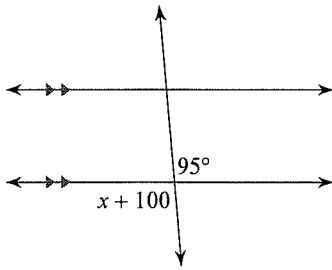


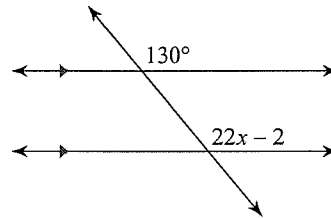
### 3.2 Parallel Lines and Transversals

Solve for  $x$ .

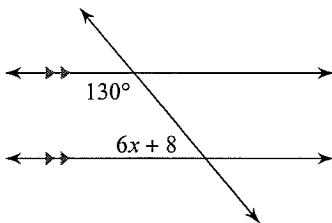
1)



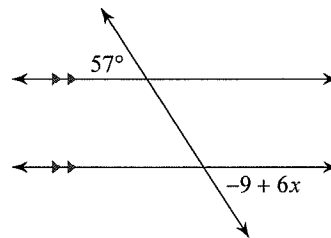
2)



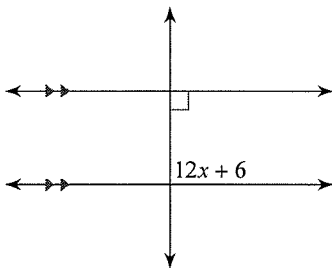
3)



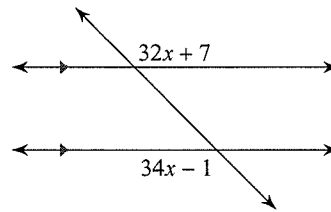
4)



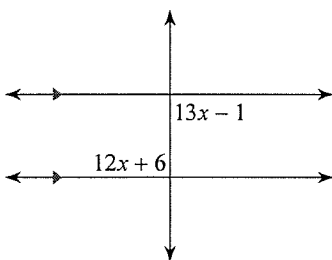
5)



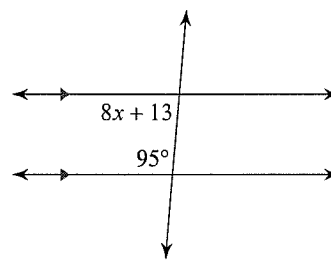
6)



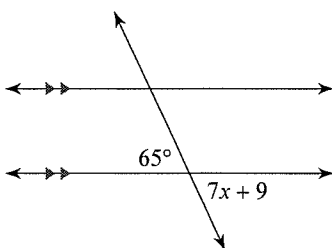
7)



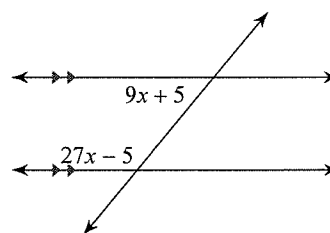
8)



9)

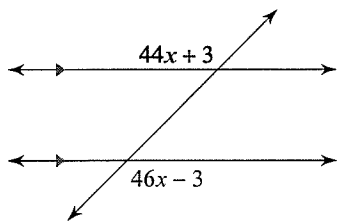


10)

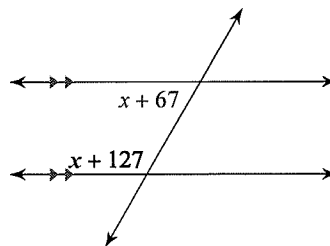


Find the measure of the angle indicated in bold.

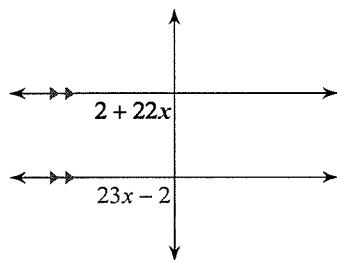
11)



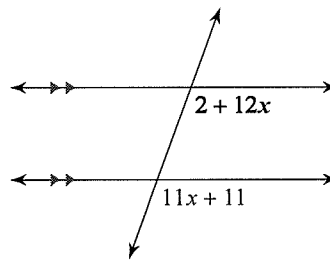
12)



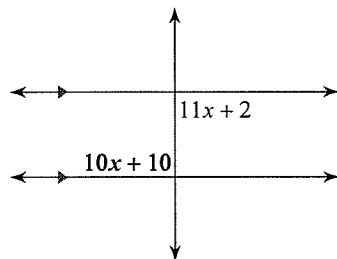
13)



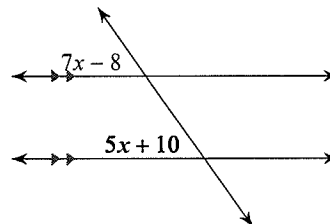
14)



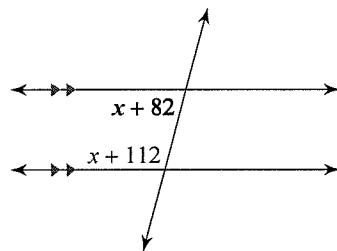
15)



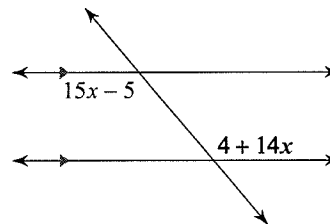
16)



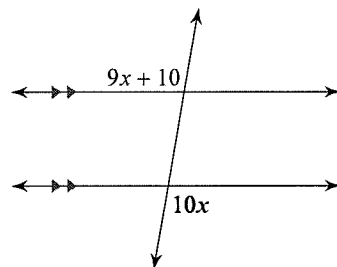
17)



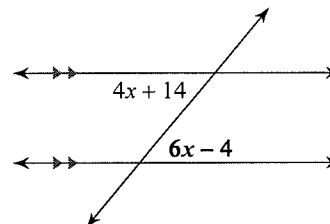
18)



19)



20)

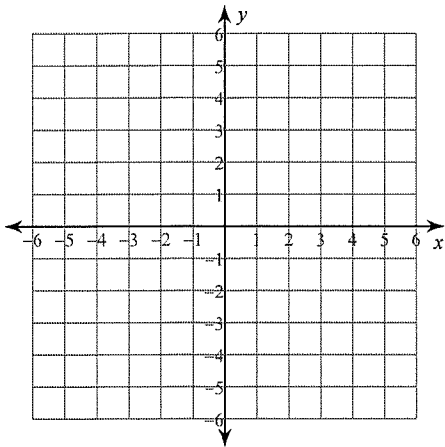


### 3.5 Graph Equations of Lines #1

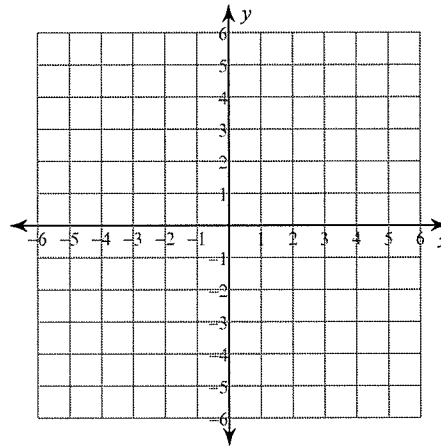
Date \_\_\_\_\_

Sketch the graph of each line.

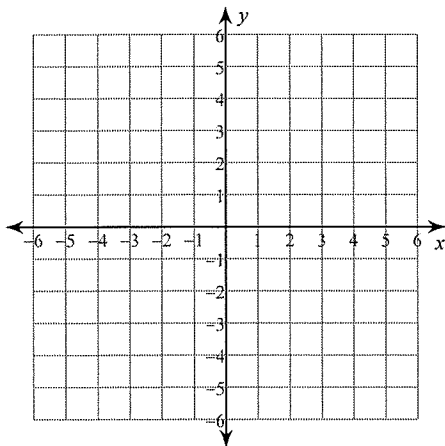
1)  $x$ -intercept = 2,  $y$ -intercept = 5



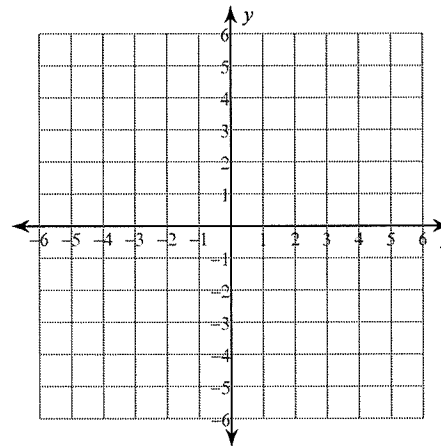
2)  $x$ -intercept = -1,  $y$ -intercept = 2



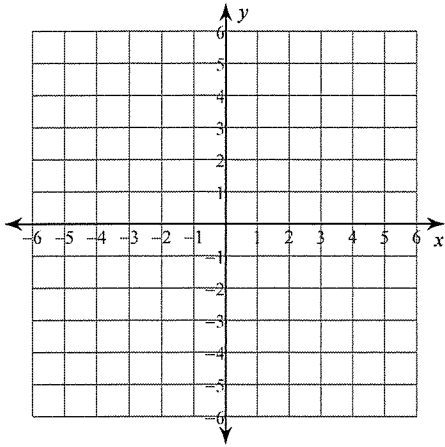
3)  $x$ -intercept = -4,  $y$ -intercept = -1



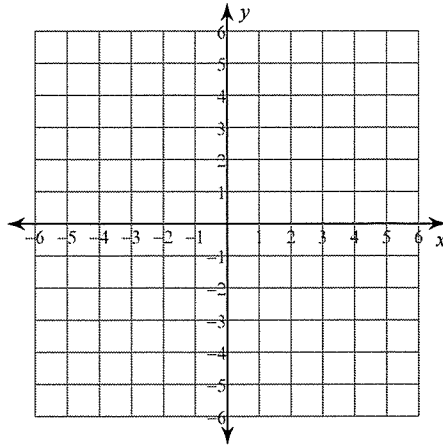
4)  $x$ -intercept = -2,  $y$ -intercept = 5



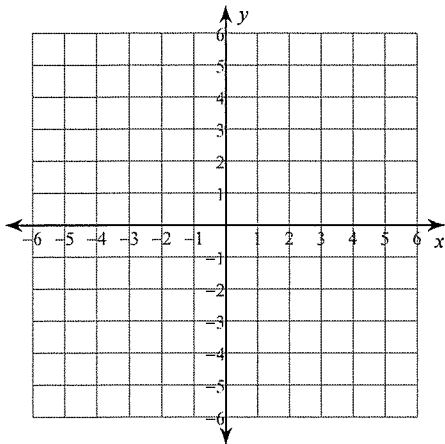
5)  $x$ -intercept = 5,  $y$ -intercept = 4



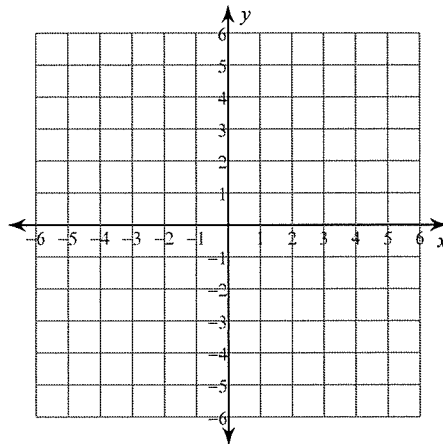
6)  $x$ -intercept = 1,  $y$ -intercept = 2



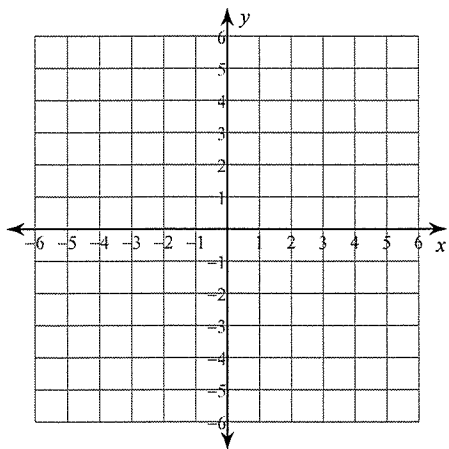
7)  $x$ -intercept = -5,  $y$ -intercept = 5



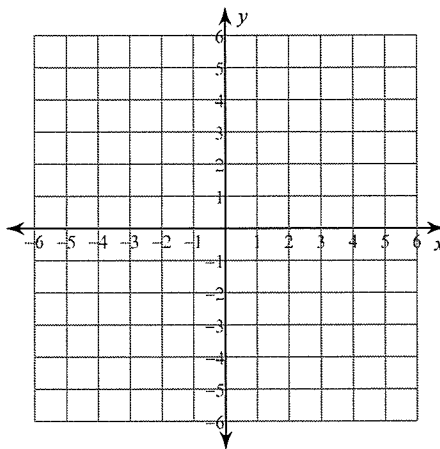
8)  $x$ -intercept = -1,  $y$ -intercept = 1



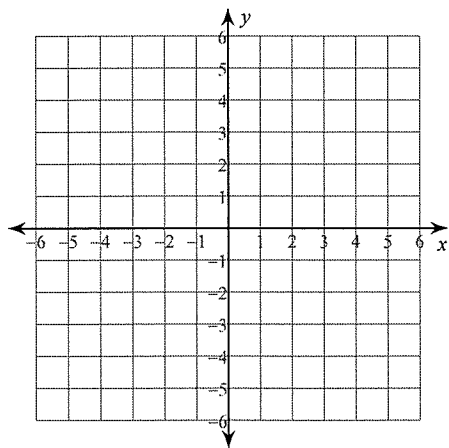
9)  $x$ -intercept = 4,  $y$ -intercept = 5



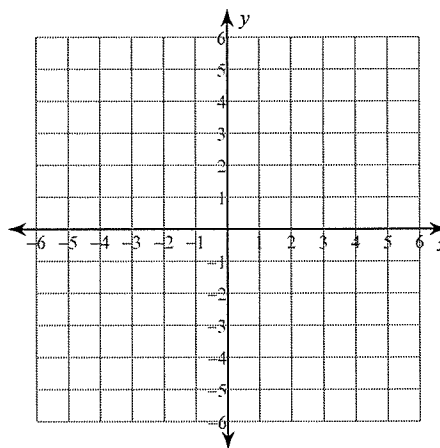
10)  $x$ -intercept = -4,  $y$ -intercept = 2



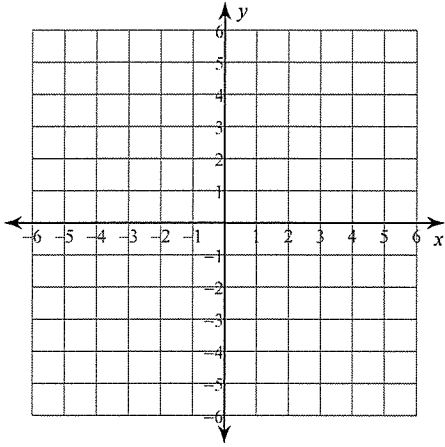
11)  $y = 5x + 3$



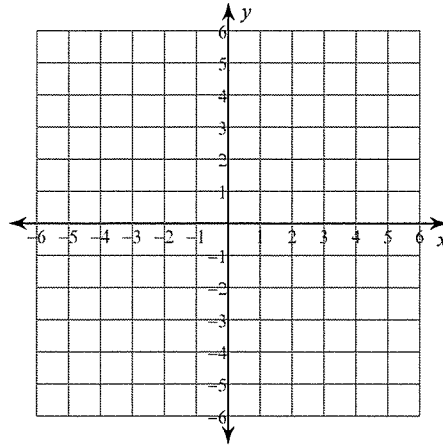
12)  $y = \frac{1}{2}x - 3$



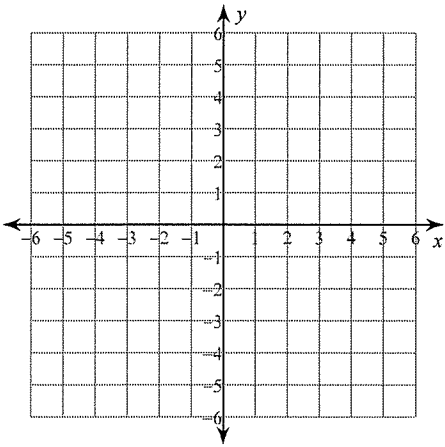
13)  $y = 9x + 5$



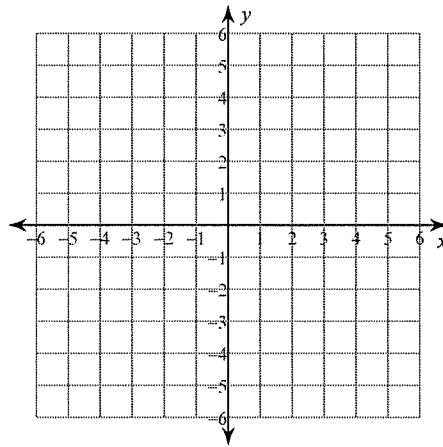
14)  $y = -x - 5$



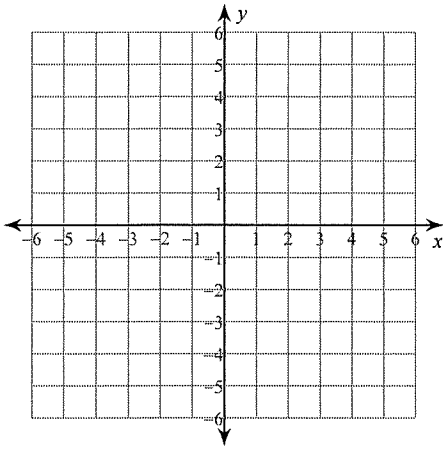
15)  $y = \frac{3}{2}x - 1$



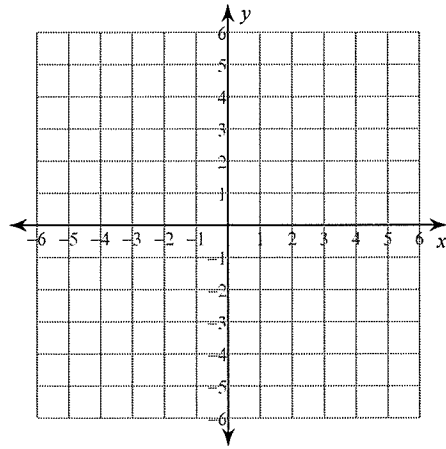
16)  $y = \frac{7}{5}x - 3$



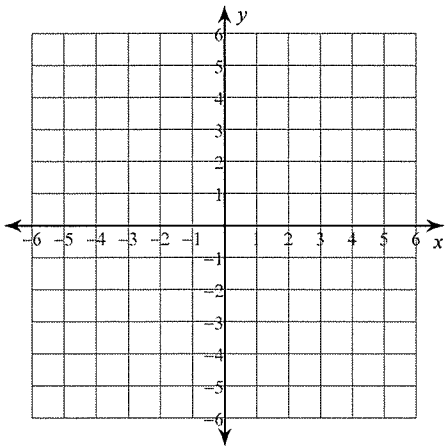
$$17) y = \frac{5}{3}x$$



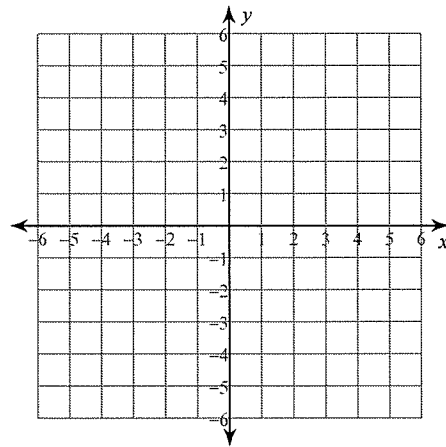
$$18) y = -\frac{2}{5}x + 1$$



$$19) y = -\frac{4}{3}x + 1$$



$$20) y = -\frac{6}{5}x + 3$$







## 3.5 Graph Equations of Lines #2

Date \_\_\_\_\_

Write the slope-intercept form of the equation of the line through the given point with the given slope.

1) through:  $(4, 4)$ , slope =  $\frac{4}{3}$

2) through:  $(-1, -2)$ , slope =  $-1$

3) through:  $(1, -5)$ , slope =  $-3$

4) through:  $(-2, 2)$ , slope =  $-1$

5) through:  $(1, -3)$ , slope =  $1$

6) through:  $(2, 2)$ , slope =  $\frac{1}{2}$

7) through:  $(2, 3)$ , slope =  $\frac{3}{5}$

8) through:  $(2, -5)$ , slope =  $-5$

9) through:  $(-4, -1)$ , slope =  $-\frac{2}{3}$

10) through:  $(-5, 3)$ , slope =  $-4$

**Write the slope-intercept form of the equation of the line described.**

11) through:  $(-2, 4)$ , parallel to  $y = -\frac{7}{2}x - 5$

12) through:  $(-3, 3)$ , parallel to  $y = \frac{2}{3}x - 4$

13) through:  $(-2, -2)$ , parallel to  $y = \frac{7}{2}x - 1$

14) through:  $(3, 4)$ , parallel to  $y = 3x + 5$

15) through:  $(-1, -5)$ , parallel to  $y = 2$

16) through:  $(-3, -3)$ , perp. to  $y = -\frac{3}{5}x + 2$

17) through:  $(2, -1)$ , perp. to  $y = \frac{1}{2}x + 2$

18) through:  $(2, 2)$ , perp. to  $y = x$

19) through:  $(5, 5)$ , perp. to  $y = -\frac{5}{3}x + 3$

20) through:  $(-3, 2)$ , perp. to  $y = \frac{3}{5}x - 3$

## 3.5 - Parallel and Perpendicular Equations

**Write the slope-intercept form of the equation of the line described.**

1) through:  $(2, 1)$ , parallel to  $y = -x$

2) through:  $(3, 2)$ , parallel to  $y = -x - 5$

3) through:  $(3, -5)$ , parallel to  $y = -\frac{5}{6}x - 3$

4) through:  $(5, 5)$ , parallel to  $y = \frac{6}{5}x + 4$

5) through:  $(2, -4)$ , parallel to  $y = -\frac{7}{2}x$

6) through:  $(1, 4)$ , parallel to  $y = 3$

7) through:  $(2, -4)$ , parallel to  $y = -x - 1$

8) through:  $(-5, 1)$ , parallel to  $y = -\frac{1}{3}x - 2$

9) through:  $(-4, 4)$ , parallel to  $y = -\frac{3}{4}x - 2$

10) through:  $(-5, 3)$ , parallel to  $y = \frac{2}{5}x + 1$

11) through:  $(-2, 0)$ , parallel to  $y = -\frac{5}{2}x + 1$

12) through:  $(0, 4)$ , parallel to  $y = -2x - 3$

13) through:  $(4, 3)$ , parallel to  $y = \frac{5}{4}x + 4$

14) through:  $(3, -3)$ , parallel to  $y = -\frac{1}{3}x + 1$

15) through:  $(-2, -1)$ , parallel to  $y = -2x + 5$

16) through:  $(-5, -1)$ , parallel to  $x = 0$

17) through:  $(3, 3)$ , parallel to  $y = -2x - 1$

18) through:  $(5, 3)$ , parallel to  $y = -\frac{1}{3}x - 4$

19) through:  $(5, -3)$ , parallel to  $y = \frac{1}{5}x - 5$

20) through:  $(1, -4)$ , parallel to  $y = -2x - 4$

21) through:  $(4, -5)$ , perp. to  $y = -\frac{1}{6}x + 3$

22) through:  $(-5, -2)$ , perp. to  $y = -\frac{5}{4}x + 1$

23) through:  $(-4, -4)$ , perp. to  $y = -2x$

24) through:  $(-1, 1)$ , perp. to  $y = \frac{1}{4}x - 2$

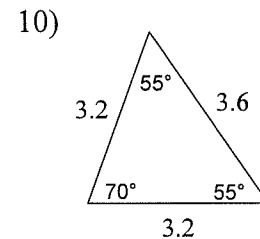
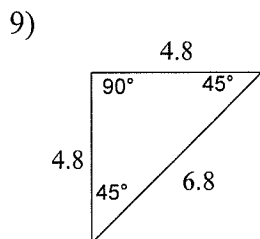
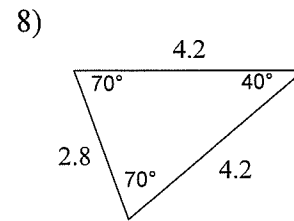
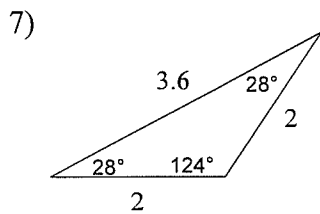
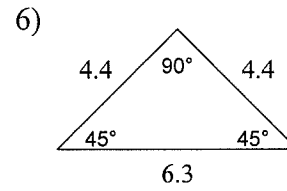
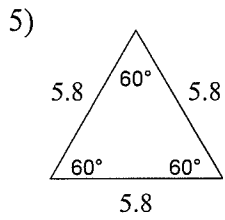
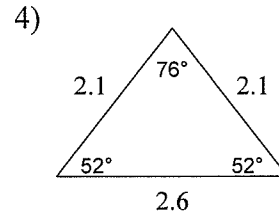
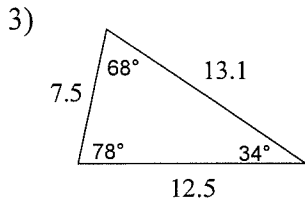
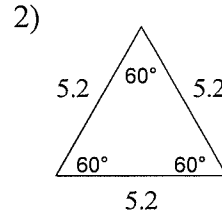
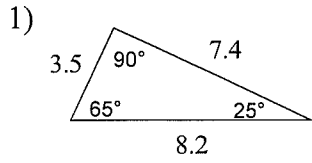
25) through:  $(4, 5)$ , perp. to  $y = -\frac{1}{2}x - 1$



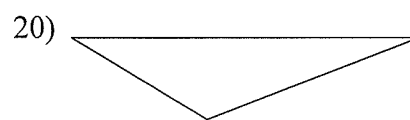
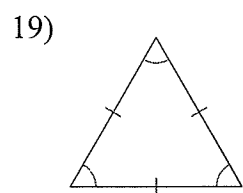
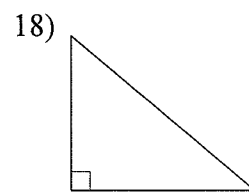
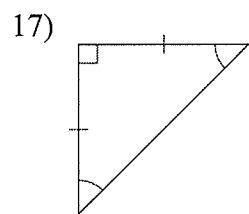
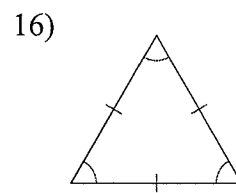
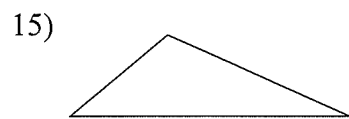
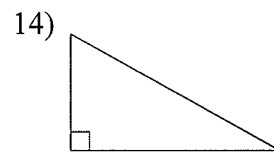
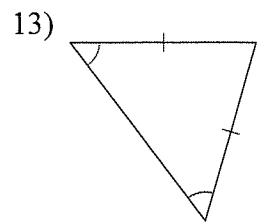
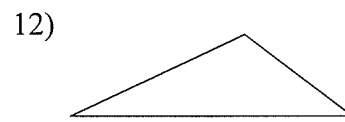
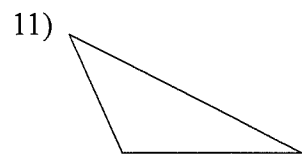
### 4.1 Classify Triangles by Angles and Sides

Date \_\_\_\_\_

Classify each triangle by its angles and sides.



Classify each triangle by its angles and sides. Equal sides and equal angles, if any, are indicated in each diagram.

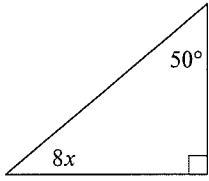




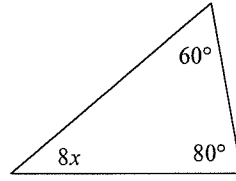
4.1.2 Angle Sum Theorem

Solve for  $x$ .

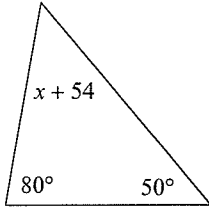
1)



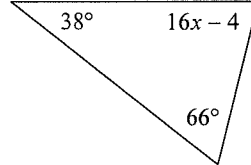
2)



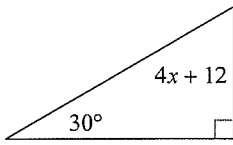
3)



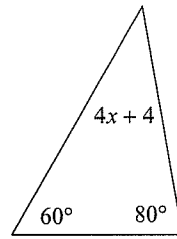
4)



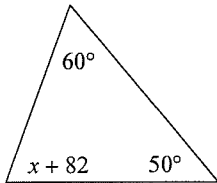
5)



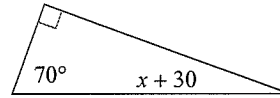
6)



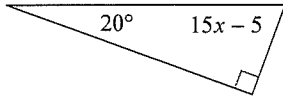
7)



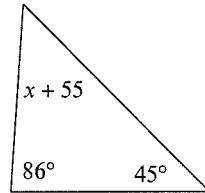
8)



9)

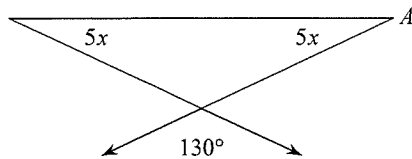


10)

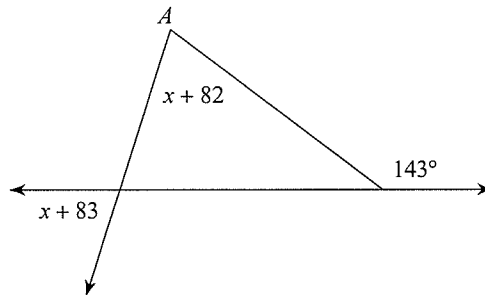


Find the measure of angle A.

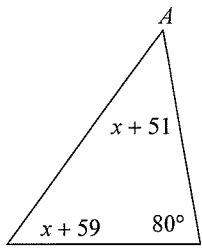
11)



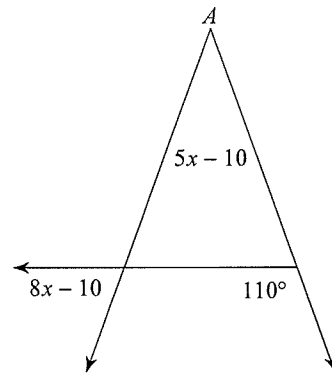
12)



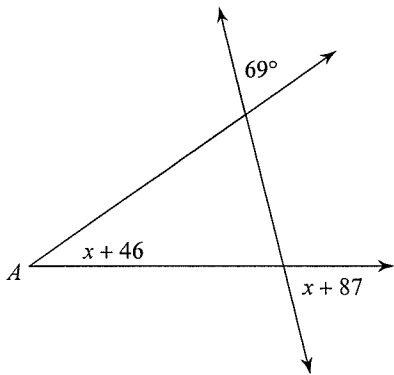
13)



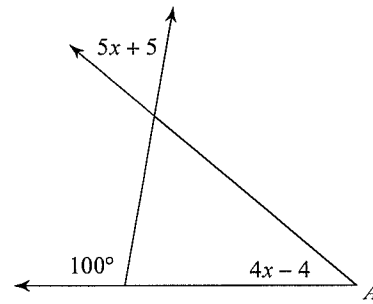
14)



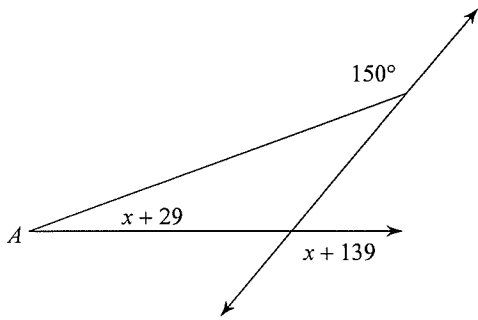
15)



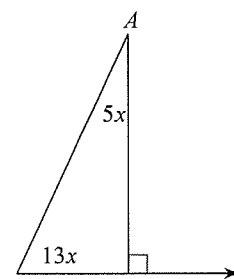
16)



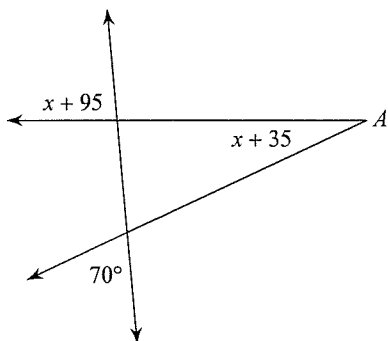
17)



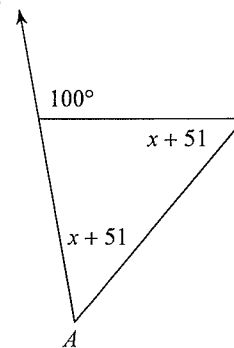
18)



19)

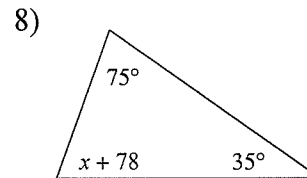
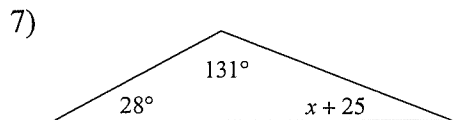
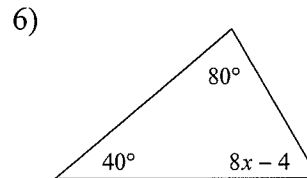
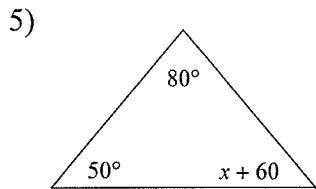
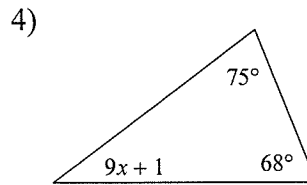
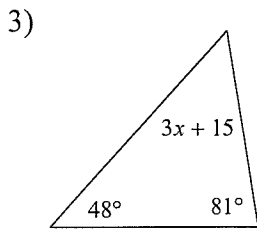
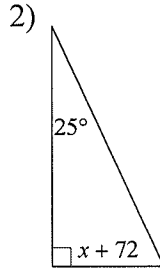
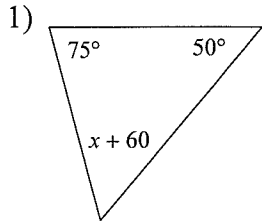


20)

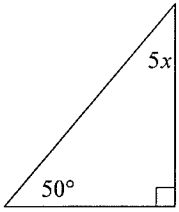


4.1.2 Triangle Sum Theorem

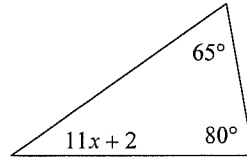
Solve for  $x$ .



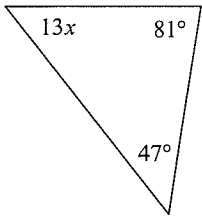
9)



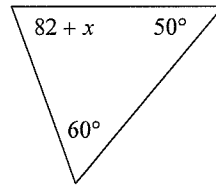
10)



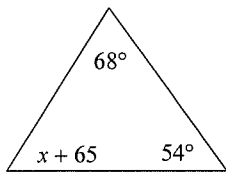
11)



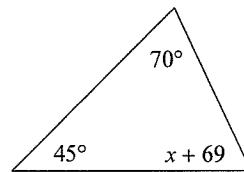
12)



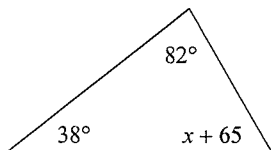
13)



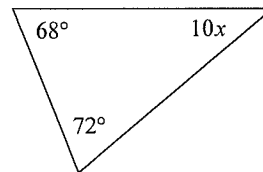
14)



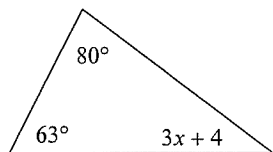
15)



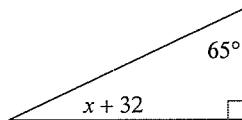
16)



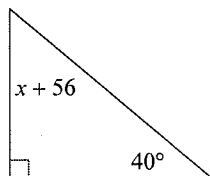
17)



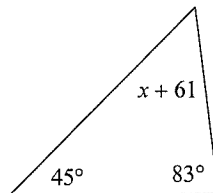
18)



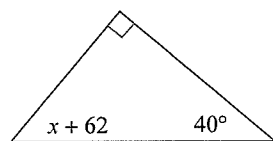
19)



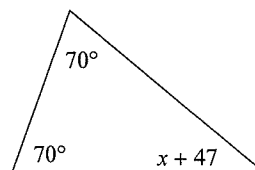
20)



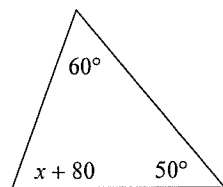
21)



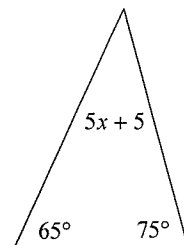
22)



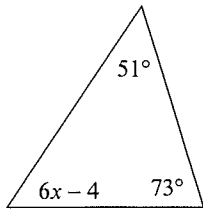
23)



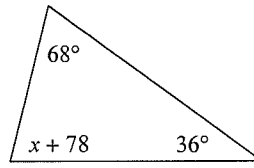
24)



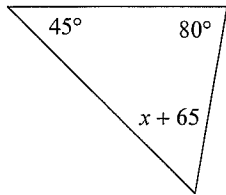
25)



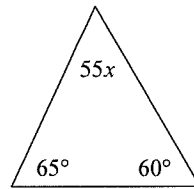
26)



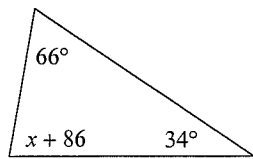
27)



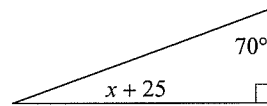
28)



29)

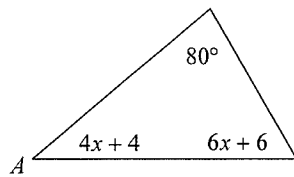


30)

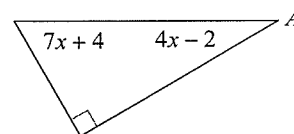


**Find the measure of angle A.**

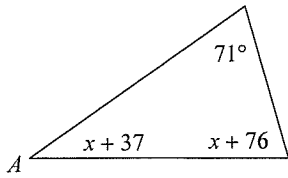
31)



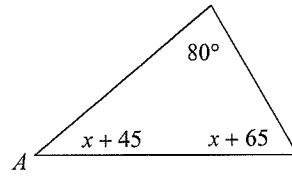
32)



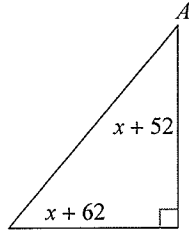
33)



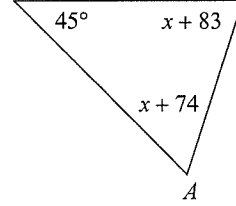
34)



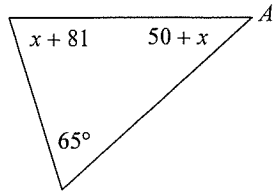
35)



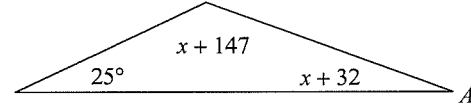
36)



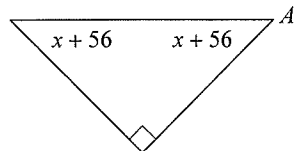
37)



38)



39)



40)

