

## Home Instruction Packet for Algebra 1B/Math B

Name of Teacher and Class: Ms. Froden, Algebra 1B/Math B, Period 6

In this packet are materials and directions.....

This work will be collected by the teacher. This work will be graded and counted towards their marking period grade.

I am available to support you during the hours 7:50am-2:50 pm to answer any of your questions. I will be responding to your emails within the hour.

You contact me at: **pfroden@rpsd.org**

Lesson: Title, Objective, What doing and how assessed.

Assignment Directions and how collected. Definitive due dates...

Week 1- Parallel and Perpendicular Lines, Graph Linear Equations

Complete the worksheets.

Lesson 1: 3.5 Parallel Lines and Transversals

Students will be required to send an email and give the answers to random problems assigned by the teacher before 8:00 pm.

Lesson 2: 3.5 Graph Equations of Lines

All packets will be handed in upon return to school.

Lesson 3: 3.5 #2 Graph Equations of Lines

Week 2- Parallel/Perpendicular Equations/Triangle Congruence

Lesson 1: 4.1 Classify triangles by angles and sides

Lesson 2: Angle Sum Theorem

Lesson 3: Triangle Sum Theorem

Week 3 – Triangle Congruence

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**510 Chestnut Street**  
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Lesson 1: 4.2.1 Prove Triangles  
Congruent

Lesson 2: 4.2.2 Prove Triangles  
Congruent

Lesson 3: Use Proofs to prove  
triangles congruent

## 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  $y = -2x$

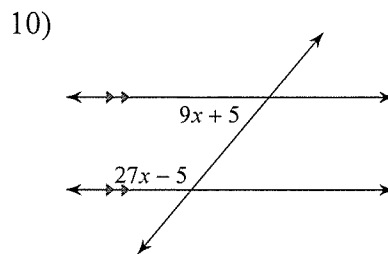
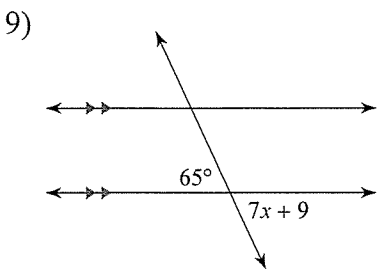
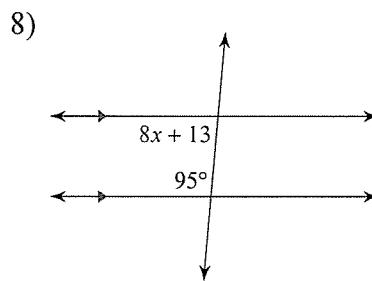
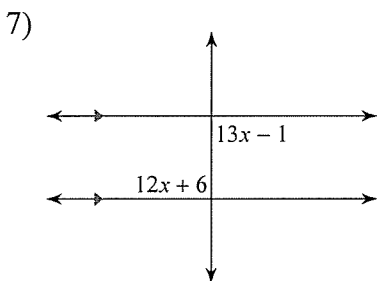
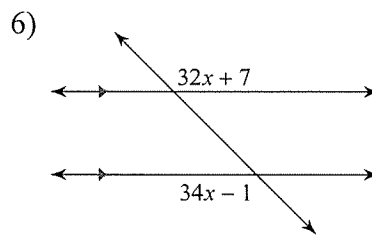
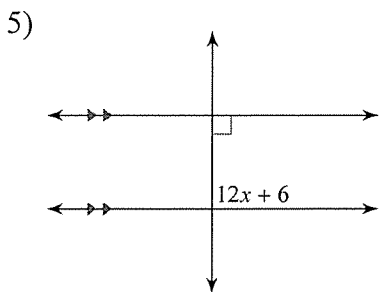
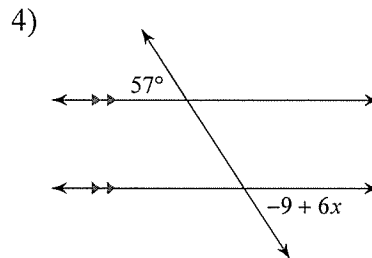
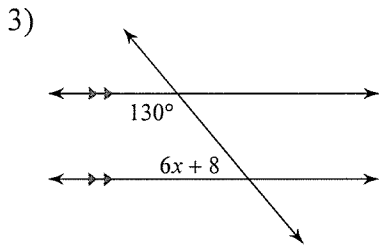
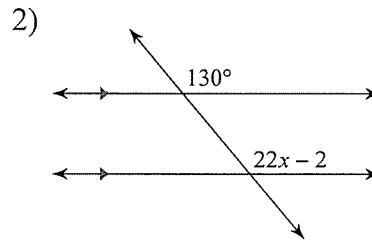
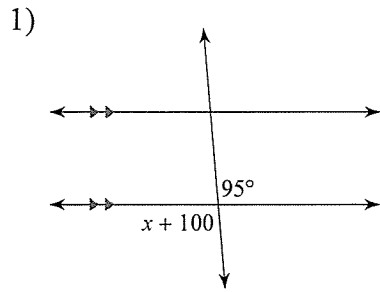
24) through:  $(-1, 1)$ , perp. to  $y = \frac{1}{4}x - 2$

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



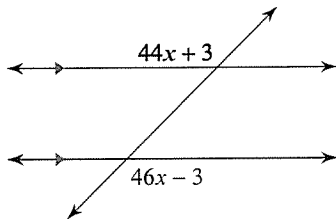
### 3.2 Parallel Lines and Transversals

Solve for  $x$ .

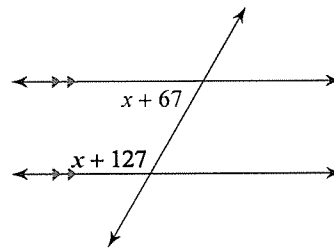


Find the measure of the angle indicated in bold.

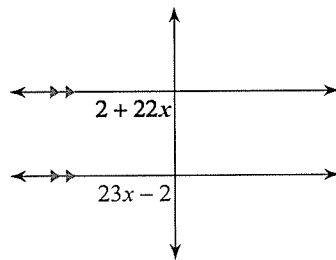
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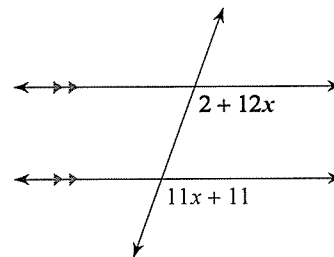
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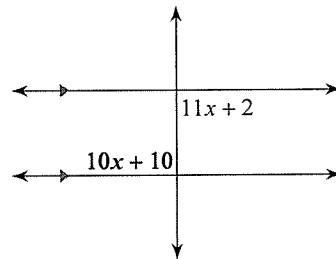
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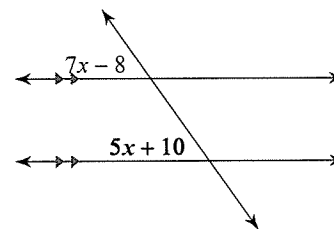
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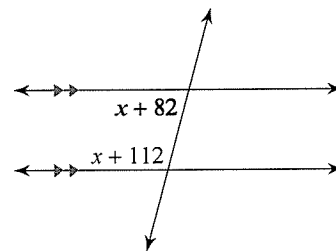
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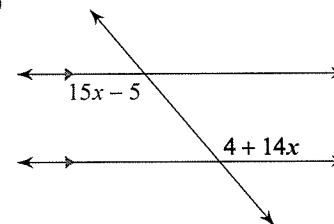
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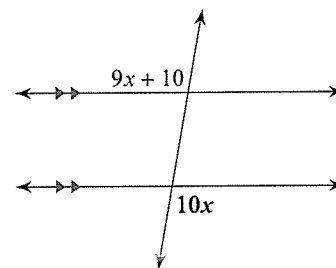
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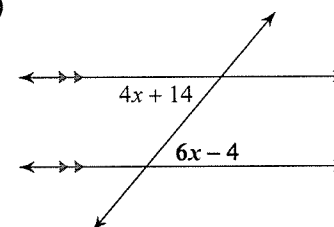
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19)



20)



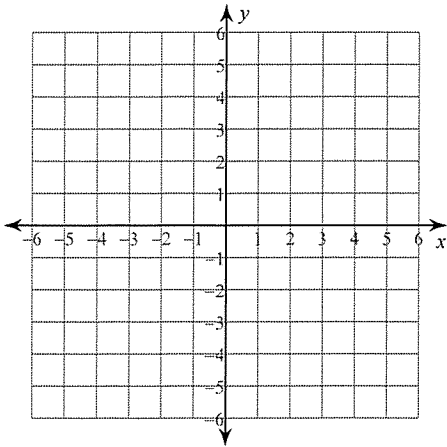


### 3.5 Graph Equations of Lines #1

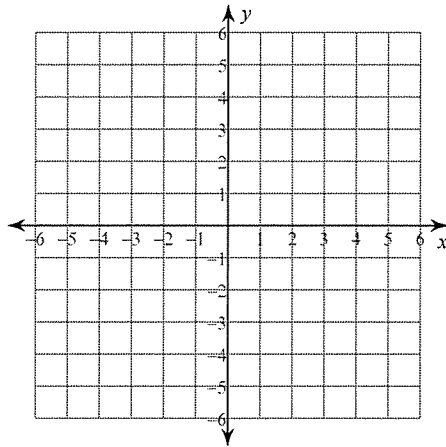
Date \_\_\_\_\_

Sketch the graph of each line.

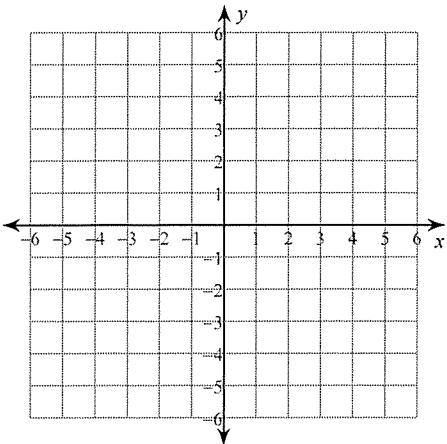
1)  $x$ -intercept = 2,  $y$ -intercept = 5



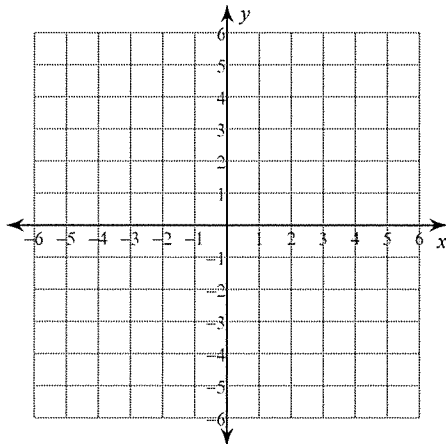
2)  $x$ -intercept = -1,  $y$ -intercept = 2



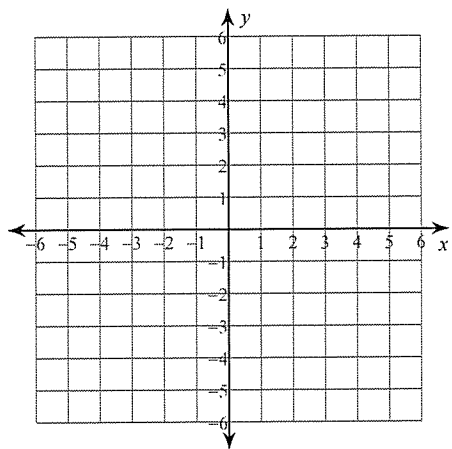
3)  $x$ -intercept = -4,  $y$ -intercept = -1



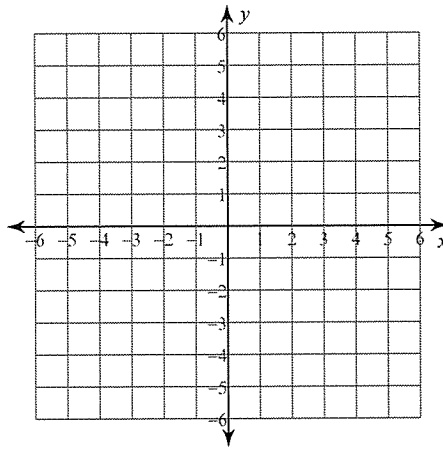
4)  $x$ -intercept = -2,  $y$ -intercept = 5



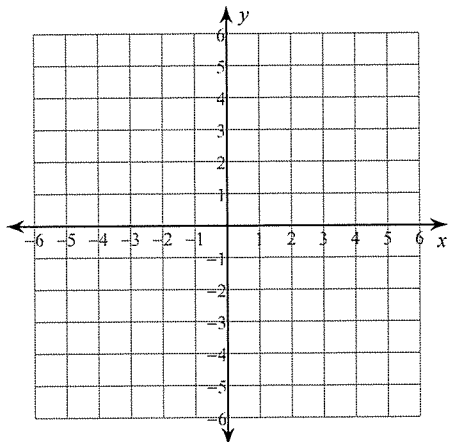
5)  $x$ -intercept = 5,  $y$ -intercept = 4



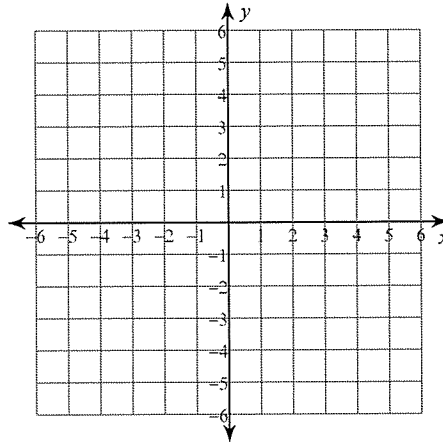
6)  $x$ -intercept = 1,  $y$ -intercept = 2



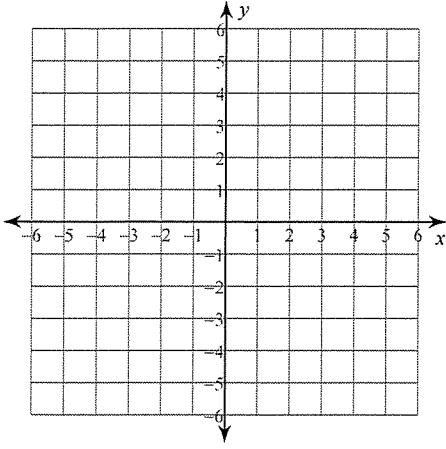
7)  $x$ -intercept = -5,  $y$ -intercept = 5



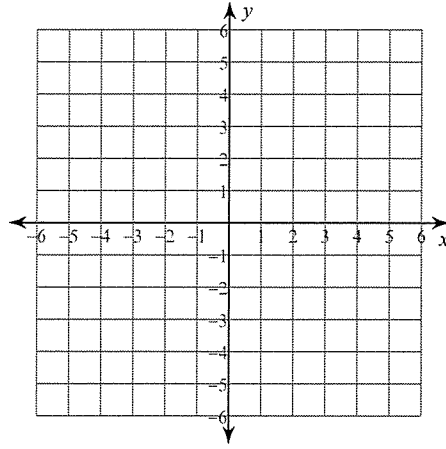
8)  $x$ -intercept = -1,  $y$ -intercept = 1



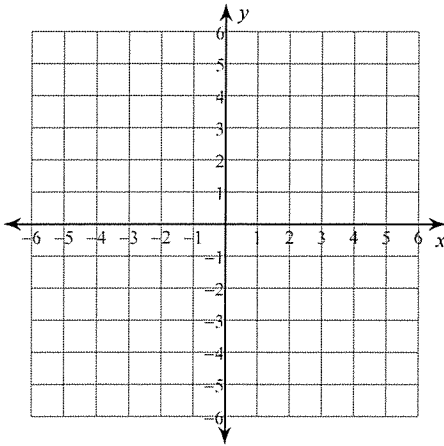
9)  $x$ -intercept = 4,  $y$ -intercept = 5



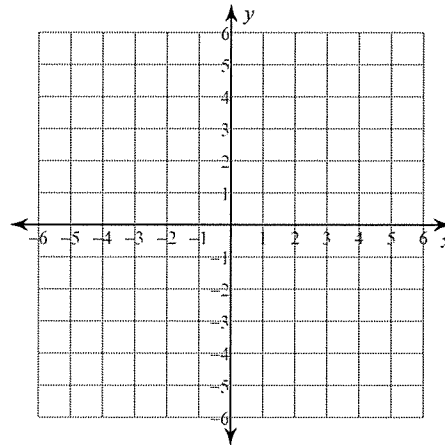
10)  $x$ -intercept = -4,  $y$ -intercept = 2



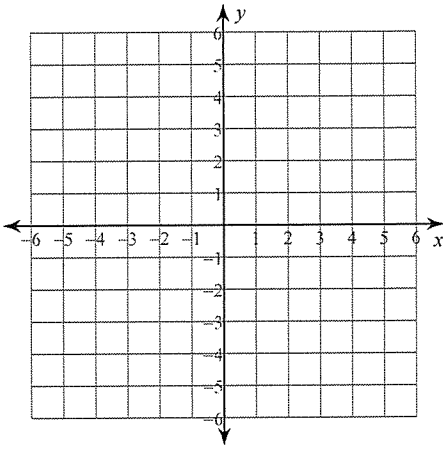
11)  $y = 5x + 3$



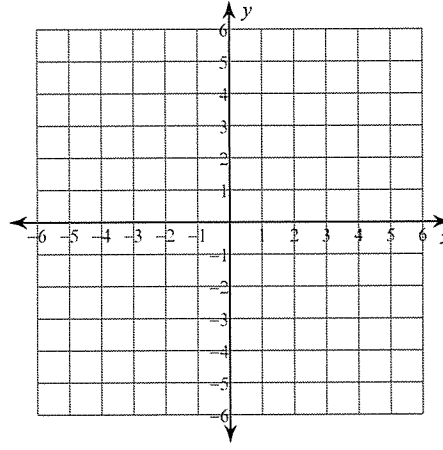
12)  $y = \frac{1}{2}x - 3$



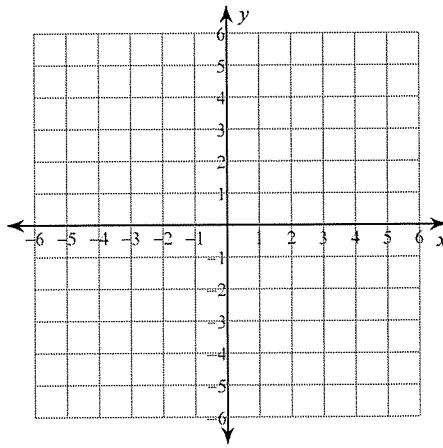
13)  $y = 9x + 5$



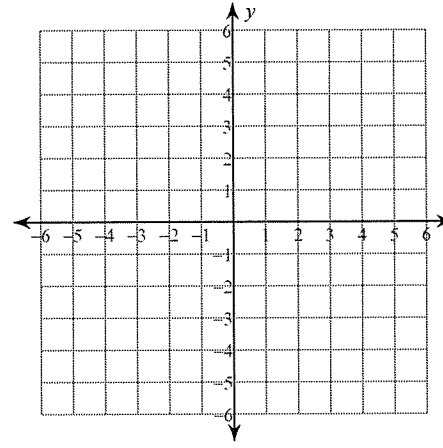
14)  $y = -x - 5$



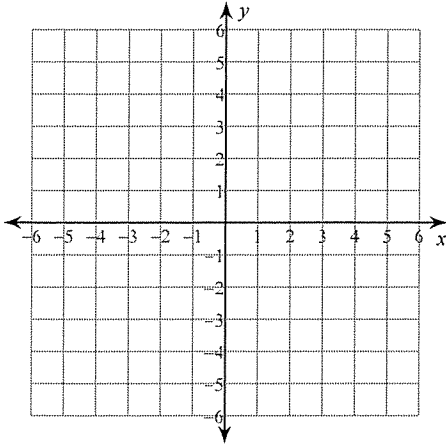
15)  $y = \frac{3}{2}x - 1$



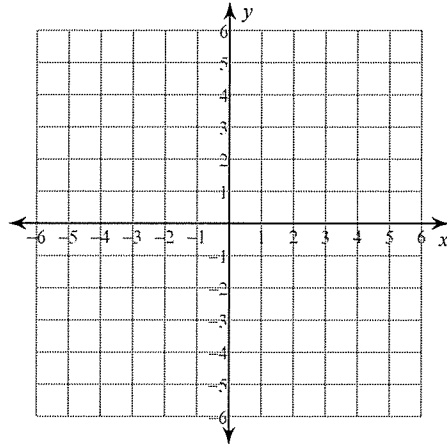
16)  $y = \frac{7}{5}x - 3$



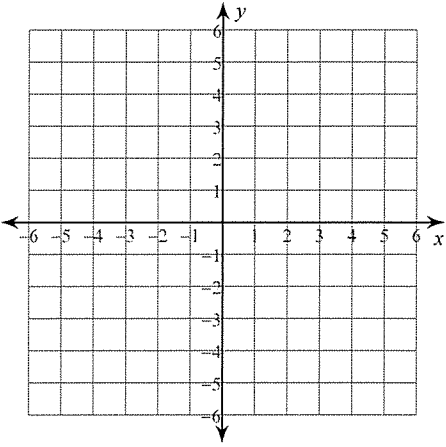
$$17) y = \frac{5}{3}x$$



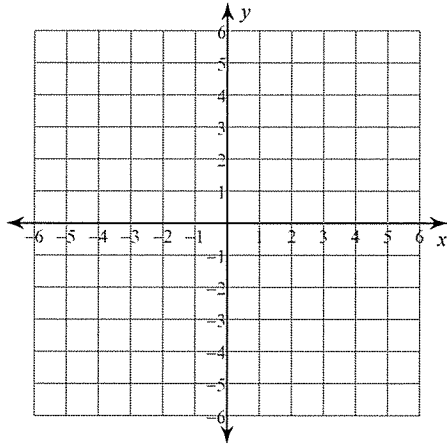
$$18) y = -\frac{2}{5}x + 1$$



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



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





## 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  $y = \frac{1}{4}x - 2$

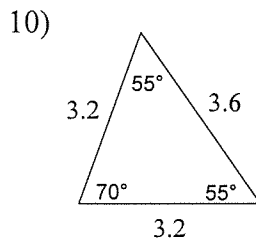
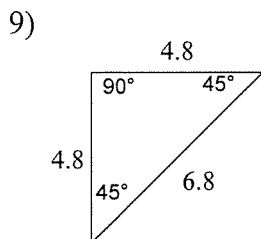
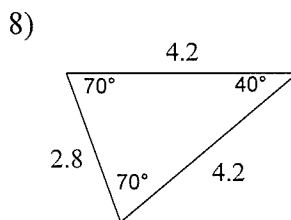
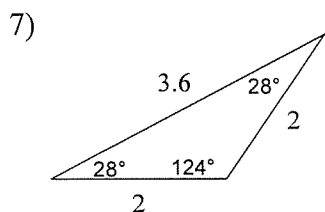
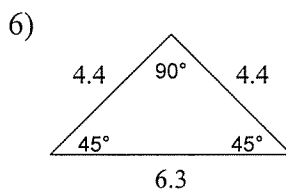
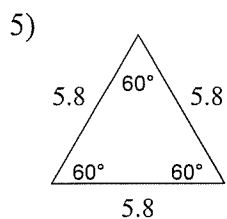
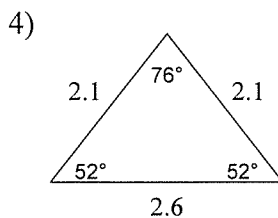
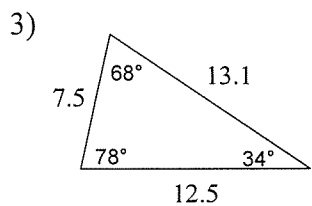
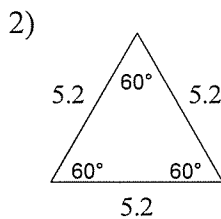
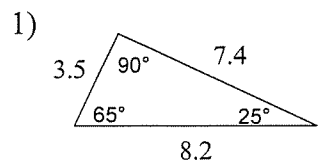
25) through:  $(4, 5)$ , perp. to  $y = -\frac{1}{2}x - 1$



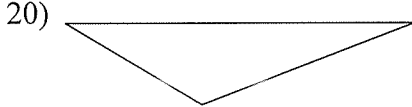
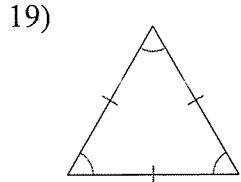
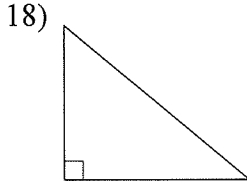
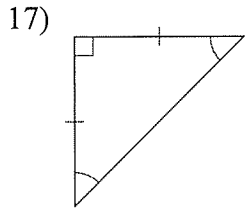
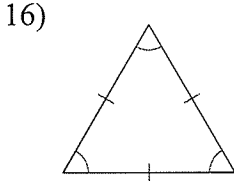
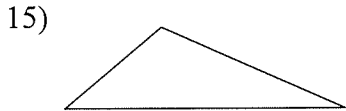
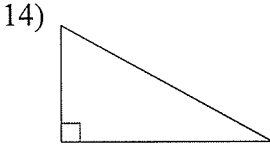
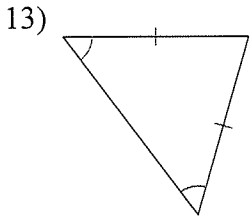
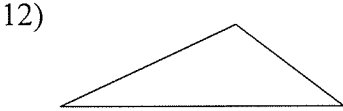
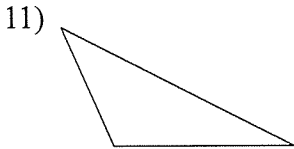
### 4.1 Classify Triangles by Angles and Sides

Date \_\_\_\_\_

**Classify each triangle by its angles and sides.**



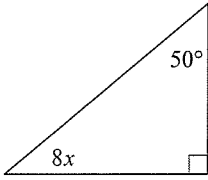
Classify each triangle by its angles and sides. Equal sides and equal angles, if any, are indicated in each diagram.



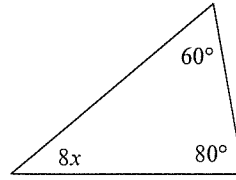
### 4.1.2 Angle Sum Theorem

Solve for  $x$ .

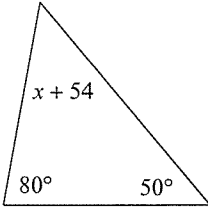
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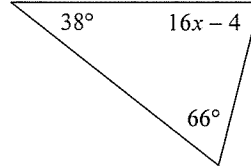
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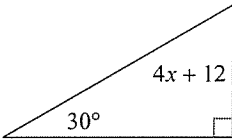
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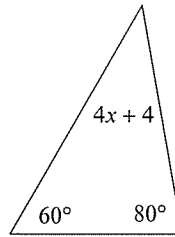
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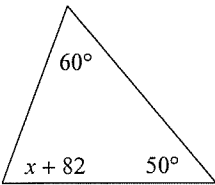
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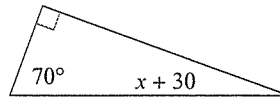
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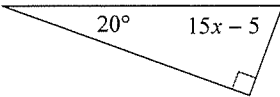
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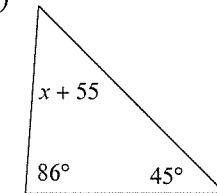
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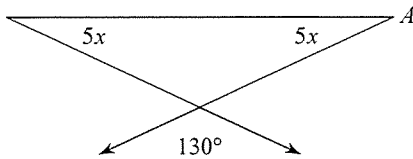


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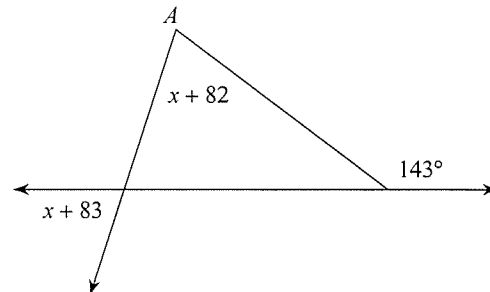


Find the measure of angle A.

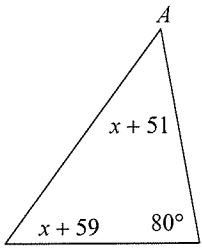
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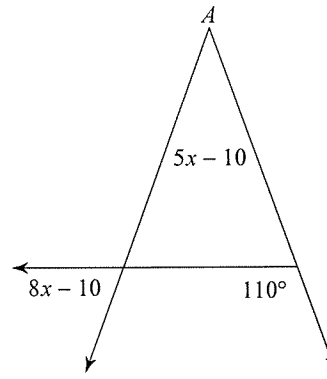
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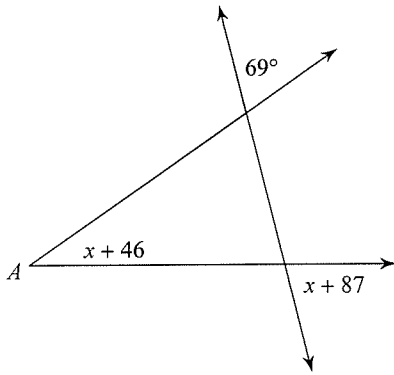
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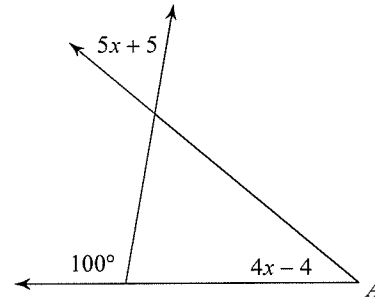
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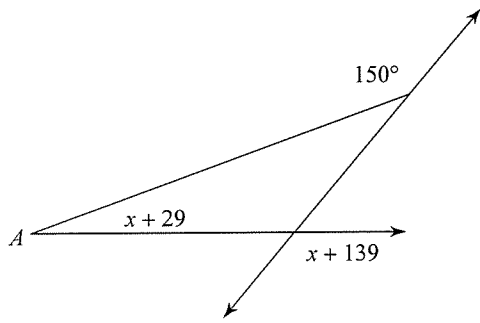
15)



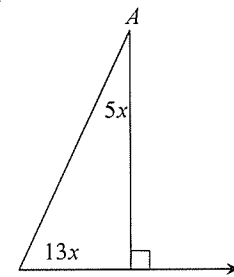
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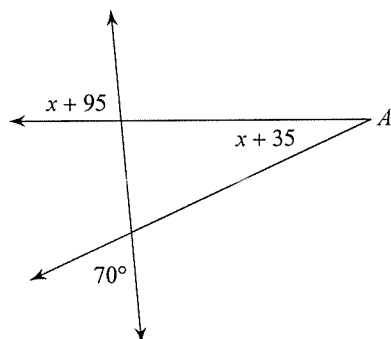
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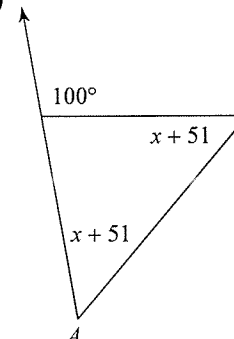
18)



19)



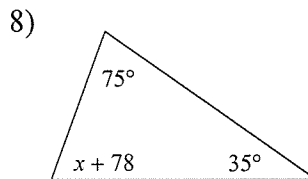
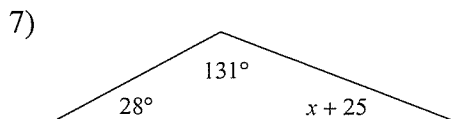
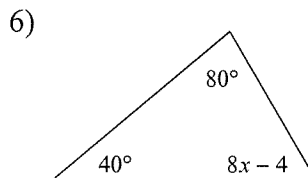
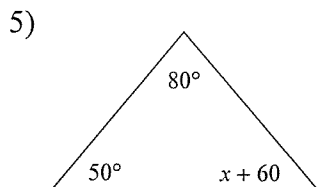
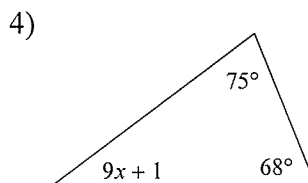
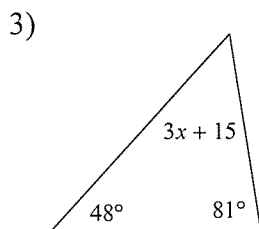
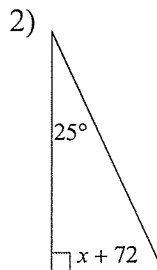
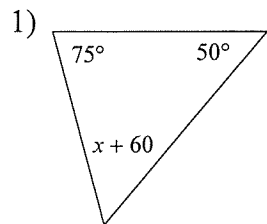
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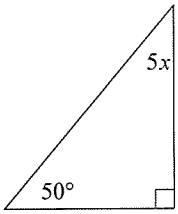


### 4.1.2 Triangle Sum Theorem

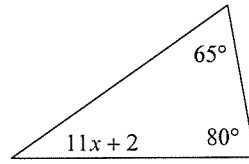
Solve for  $x$ .



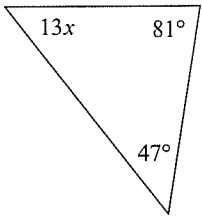
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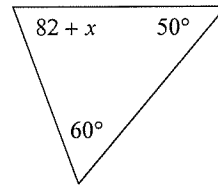
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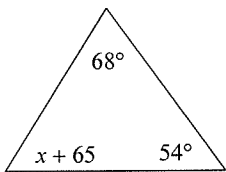
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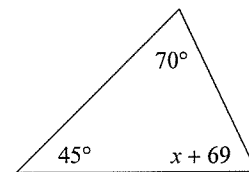
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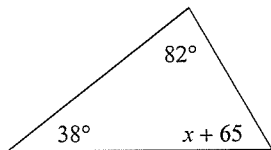
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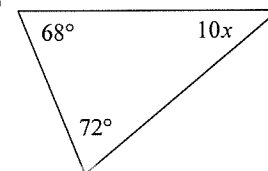
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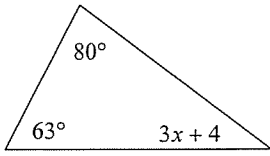
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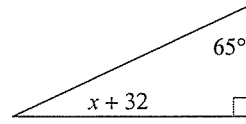
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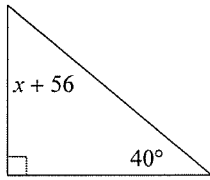
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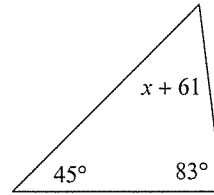
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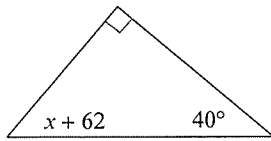
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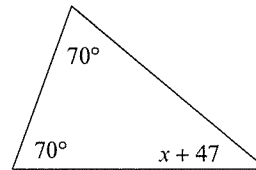
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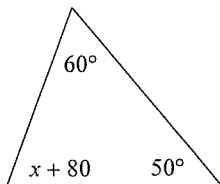
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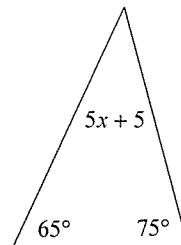
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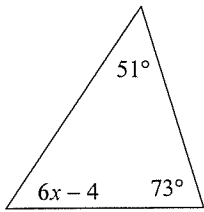
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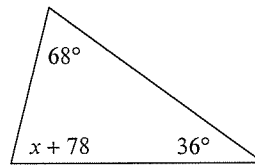
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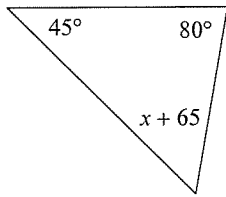
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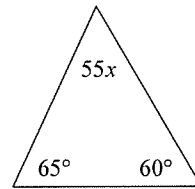
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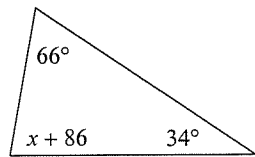
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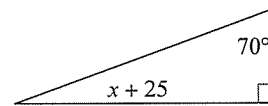
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29)

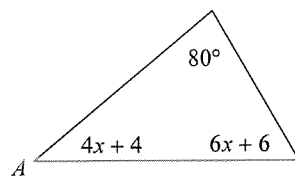


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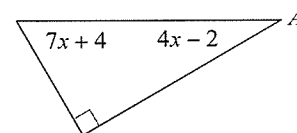


**Find the measure of angle A.**

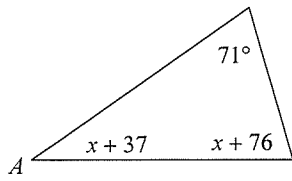
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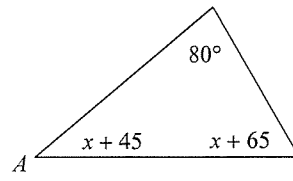
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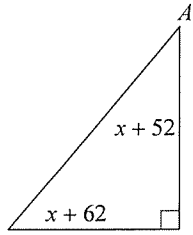
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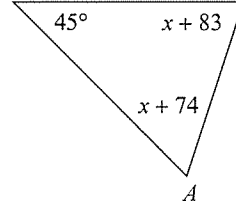
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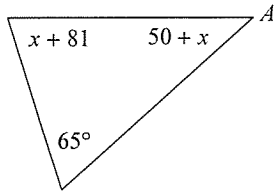
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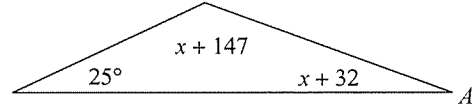
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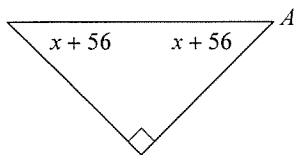
37)



38)



39)



40)

