

Name: _____

Period: _____

Homework 15 Due FRIDAY, February 23rd

A. Translate the following into algebraic expressions

- | | |
|---|-------------------------------------|
| 1. The sum of 3 and a number | 2. The product of 7 and a number |
| 3. The quotient of 3 and a number | 4. Nine increased by twice a number |
| 5. Seven times the difference of a number and 5 | 6. Ten less than one half a number |

B. Identify the slope as a fraction and the p-intercept of each equation. Then graph on the coordinate plane.

1. $y = 2x + 1$

2. $y = 3x - 4$

3. $y = \frac{2}{3}x + 5$

Slope:

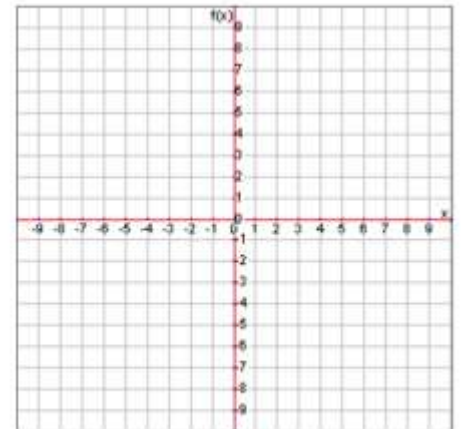
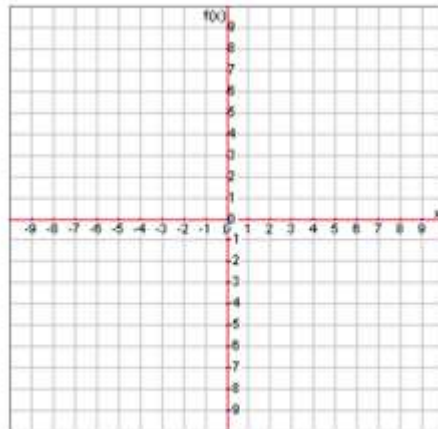
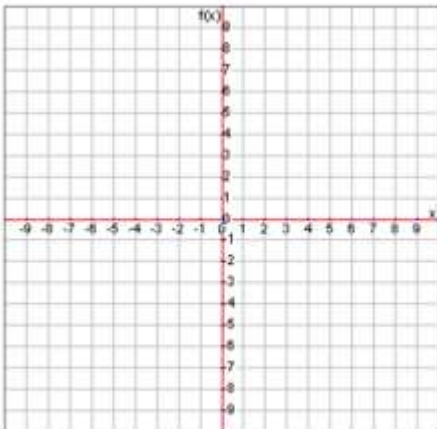
Slope:

Slope:

y-int:

y-int:

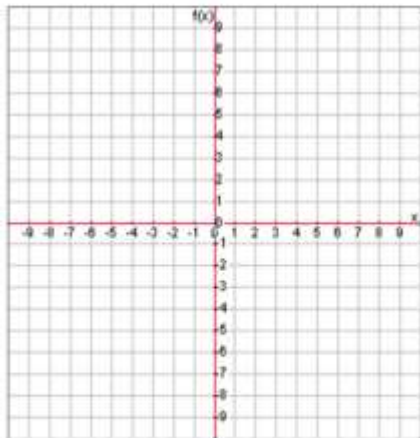
y-int:



4. $y = 7$

Slope:

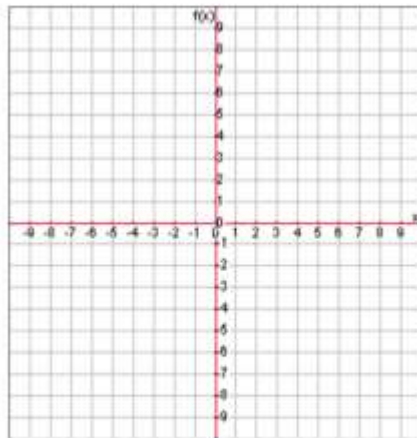
y-int:



5. $y = -3x - 2$

Slope:

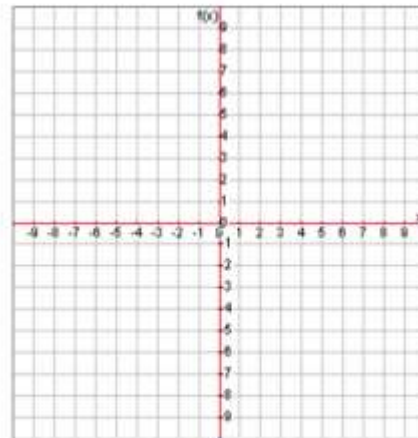
y-int:



6. $y = -\frac{1}{3}x + 5$

Slope:

y-int:



C. Ivan bought P pounds of peaches at \$2.29 per a pound and G pounds of grapes at \$3.79 per pound.

1. Write an expression that gives the amount Ivan paid for the peaches and for the grapes.

2. Suppose he bought 2 pounds of peaches and 3 pounds of grapes. How much did he spend in total?

D. Simplify each algebraic expression by combining like terms.

1. $4y + 2y + 3y$

4. $5x + 9y + 3x - 2y$

7. $22u - 6u + 4t + 4t - 8u$

2. $8x + x - 5x$

5. $14p + 8 + 1 - 14p$

8. $x + y + x + x + 2y - x$

3. $10m - 4m + 2m - 3m$

6. $11 + 5d - 3d - 4$

9. $15 + 8n + 3n - 2 - 13$

E. Simplify each algebraic expression by using the distributive property.

1. $5(x+6) =$

2. $3(2x+1) =$

3. $2(2x-3) =$

4. $6(x-4) =$

5. $8(2x-3) =$

6. $-3(x + 4) =$

7. $-2(3x - 1) =$

8. $-10(2x + 1/5) =$

9. $-18(x - 2/3) =$

F. Provide an equation for each table written in slope-intercept form ($y=mx+b$)

x	y
-2	4
-1	3.5
0	3
1	2.5
2	2

m:

y- intercept:

Equation:

x	y
-5	-16
-2	-7
0	-1
3	8
5	14

m:

y- intercept:

Equation:

x	y
-2	-3
-1	-1
0	1
1	3
2	5

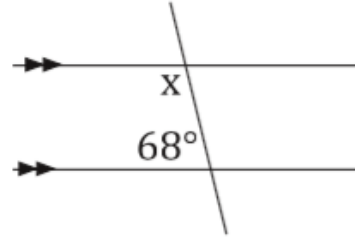
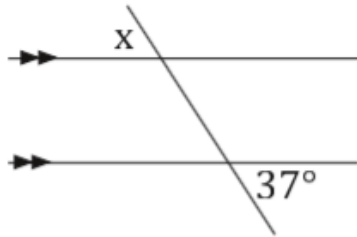
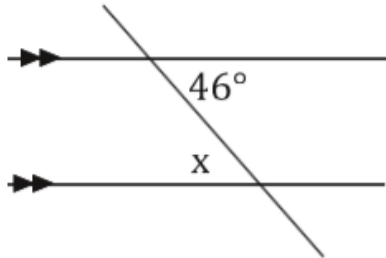
m:

y- intercept:

Equation:

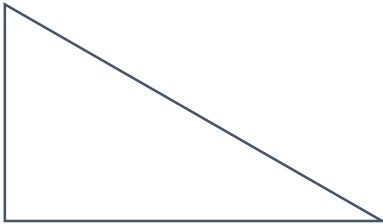
Spiral Review (Required)

1. Using what you know about angle relationships, determine the missing angle measure (x) of the following:



2. Classify each of the following triangles based on side length AND angle measures. **Each triangle should have two names written by it.**

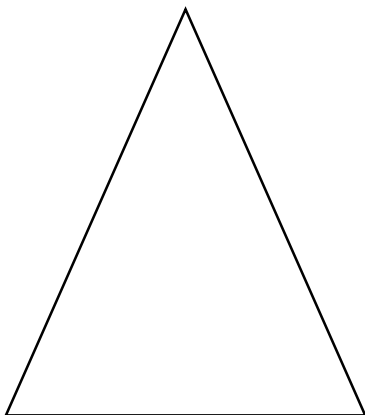
a.



Classify by Angles: (circle one) Acute Obtuse Right Equiangular

Classify by Sides: (circle one) Scalene Isosceles Equilateral

b.



Classify by Angles: (circle one) Acute Obtuse Right Equiangular

Classify by Sides: (circle one) Scalene Isosceles Equilateral