Solve each system by substitution.

1) $y = 2x + 9$ $y = 3x + 12$	2) $y = 2x - 3$ $y = -4x + 9$	3) $y = -2x + 6$ $y = 2x + 2$
4) $y = -1$ $y = x + 2$	5) $y = -3x + 5$ $2x + 2y = -2$	6) $y = -3x - 3$ $4x + 4y = -12$

Solve each system by graphing.

7)

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

$$y = -\frac{7}{3}x + 4$$
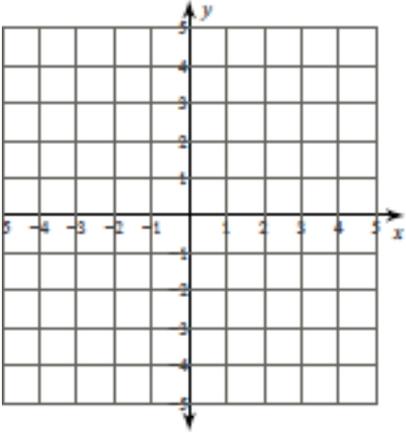
8)

$$y = \frac{1}{3}x + 3$$

$$y = 2x - 2$$

9)

$$y = -7x - 3$$

$$y = 4$$

10)
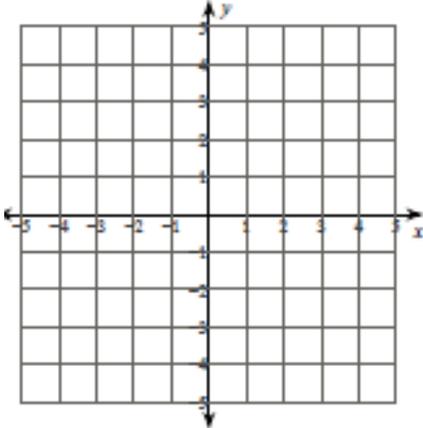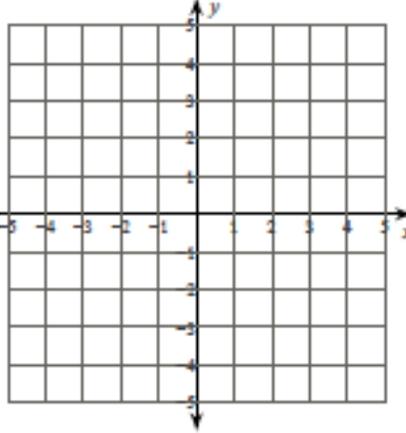
$$y = -\frac{2}{3}x - 2$$

$$y = -\frac{8}{3}x + 4$$
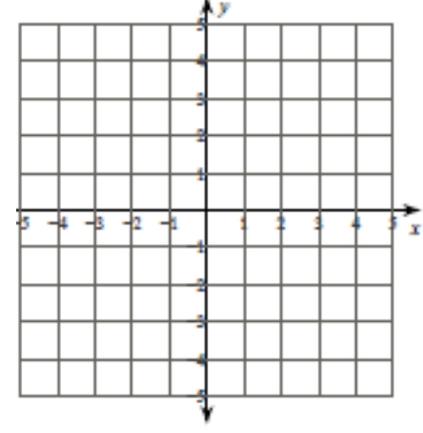
11) What is the value of $0.\overline{36} \cdot \frac{11}{2}$?	12) What is the sum of all the integers between $\sqrt{19}$ and $\sqrt{77}$?
13) On a number line, let point *P* represent the largest integer value that is less than $\sqrt{407}$. Let point *Q* represent the largest integer value that is less than $\sqrt{68}$. What is the distance between P and Q?	14) What is the value of $\dfrac{4^3 \cdot 4^{-1} \cdot 5^{-2}}{4^4 \cdot 5^{-3} \cdot 5^0}$?
15) When 8 is added to the number that is produced by doubling the number x, the result is equal to 8 times the number that is 5 less than x. What is the value of x?	16) In ΔWXY, $\overline{WY}$ is congruent to $\overline{XY}$. The perimeter of ΔWXY is 76 inches. How many inches long is $\overline{WX}$?.
17) Kyle is a salesman. His monthly earnings include a fixed monthly salary and a commission that is a fixed percentage of his total sales for the month. - Kyle's total sales for the month of January were $15,000, and his total earnings for that month were $2,550. - Kyle's total sales for the month of February were $25,000, and his total earnings for that month were $3,050. What is Kyle's fixed monthly salary in dollars?	18) In the table below, y is a linear function of x. What is the value of y when x = 0?
19) Beginning in 2000, a sports team increased its ticket price by a constant amount each year until 2010. - A ticket cost $48 in 2005. - A ticket cost $55.50 in 2008. How much did a ticket cost in 2000? Express your answer as dollars.cents.	
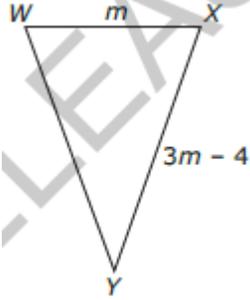
For question 16:

W — m — X (top), with segment labeled $3m - 4$ along the right side down to Y.

For question 18:

x	y
3	5
5	⁻3
7	⁻11