Unit 2A Review Name: _____ Pd: _____

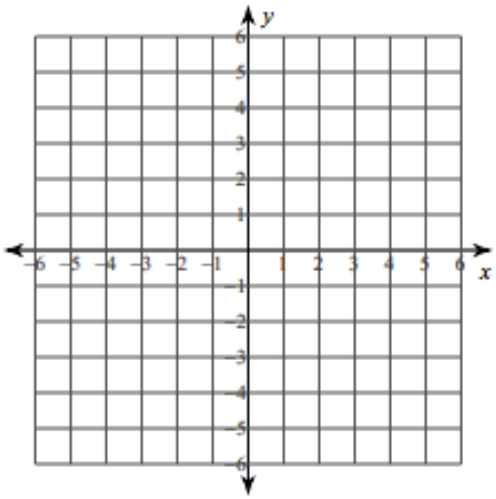
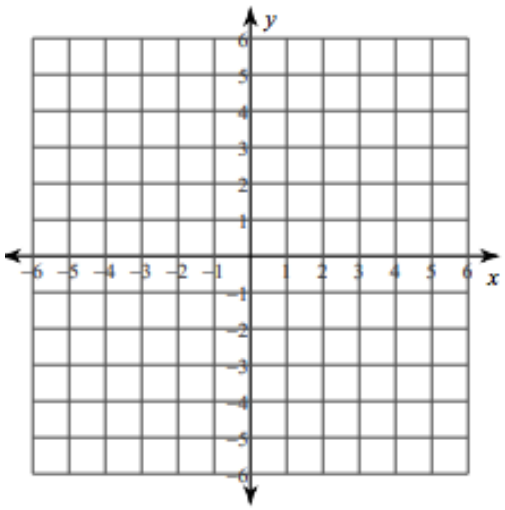
1. Writing real-world scenarios and defining variables

A. Frank's Farm charges $5 for admission to their apple orchard and $0.89 for each pound of apples purchased. Write an equation that represents the cost of getting apples at the apple orchard. Be sure to specify what the variables represent.	B. T-shirts cost $15. Each letter of personalization costs $1.25, and each number costs $2.50. Write an equation that represents the cost of a t-shirt. Be sure to specify what the variables represent.

2. Solve each equation:

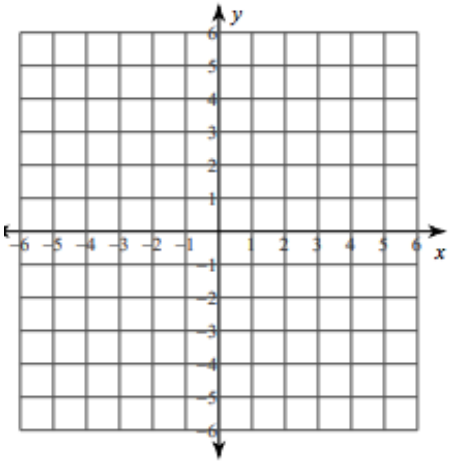
A. $\frac{3}{2}x + 7x - 7 = 3(2x + 1)$	B. 5 – 2(x + 6) = 3x + 2

3. Find the intercepts, then use the intercepts to graph the equation.

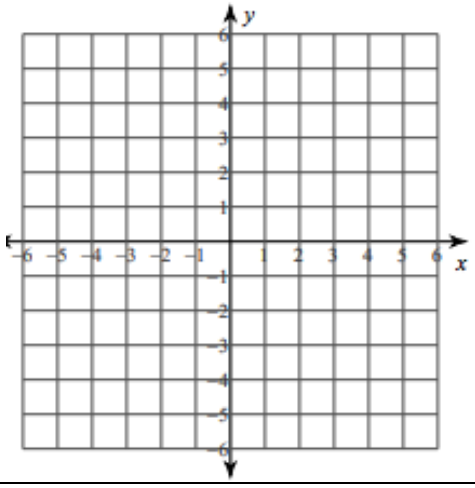
A. 2x + y = 4	B. 3x + 4y = -12
	

4. Graphing using slope-intercept form

A. $y - 3 = 4x$



B. $2y + 6x = -6$



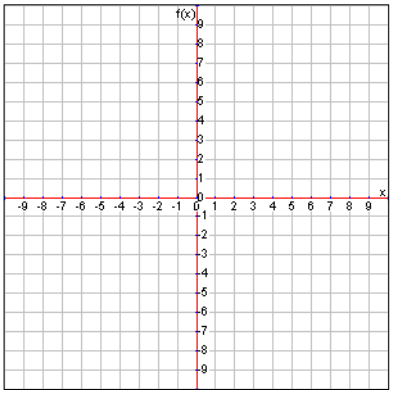
5. Solve for the indicated variable. Work should be completed on other paper.

A. Solve for r	**B.** Solve for y	**C.** Solve for C
$C = 2\pi r$	$3x - 7y = -30$	$F = \frac{9}{5}C + 32$

6. Solve each system using graphing:

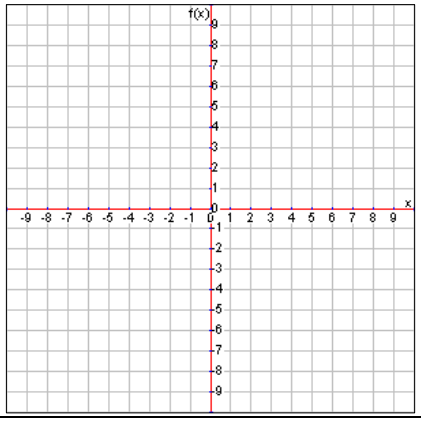
A. $y = 3x - 2$

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



B. $2y = 4x - 8$

$-x + 3y = 9$



6. Solve each system using substitution. Work should be completed on other paper.

A.	**B.**
$x + y = 7$ $2x + y = 5$	$x + 2y = 7$ $2x - 8y = 8$

7. Solve each system using elimination. Work should be completed on other paper.

A.	**B.**
$x + y = 1$ $x - y = 5$	$4x + y = -9$ $4x + 2y = -10$
C.	**D.**
$3x + y = 2$ $6x + 3y = 5$	$4x + 3y = 19$ $3x - 4y = 8$