

## Units 2 &amp; 4: Equations and Quadratics /18K /14T /13C

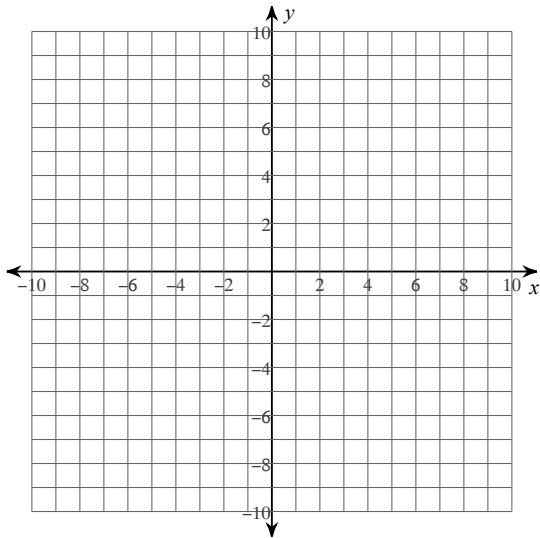
**Solving Systems of Equations**

1) What does it mean to find the point of intersection? \_\_1C

**Solve each system by graphing. \_\_5C**

2)  $y = -\frac{4}{3}x + 9$

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

**Solve the system by substitution. \_\_4T**

3)  $-4x - 7y = -11$

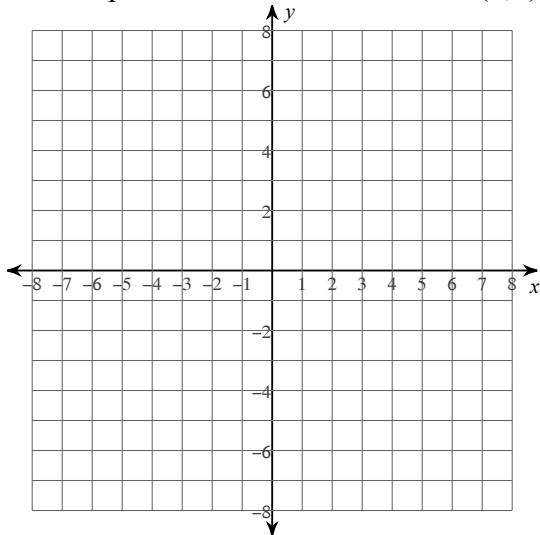
$y = -3x - 13$

**Solve the system by elimination. \_\_\_\_4T**

4)  $6x - 18y = -6$   
 $-2x - 9y = -28$

**Quadratics.**

5) Draw a parabola that has a vertex of (2,6), a y-intercept of 4.5, and zeros of -2 and 6. \_\_\_\_3C



**Multiply the Binomials. \_\_\_\_2K \_\_\_\_2K**

6)  $(4x + 3)(x + 6)$

7)  $2(5x + 7)(6x - 5)$

**Factor each completely. \_\_\_\_2K \_\_\_\_3K \_\_\_\_2K**

8)  $x^2 + 8x - 20$

9)  $5x^2 + 30x + 40$

10)  $25n^2 - 16$

**Do these steps:**

**a) Covert from Standard Form to Zeros form by Factoring. \_\_\_\_2T**

**b) State the zeros from the Factored Form. \_\_\_\_1T**

**c) Calculate the AoS (the h). \_\_\_\_1T**

**d) Calculate the Max/Min Value (the k). \_\_\_\_1T**

**e) State the Vertex. \_\_\_\_1T**

11)  $y = 4x^2 + 24x - 220$

**Do these steps:**

- a) State the vertex. \_\_1K**
- b) Expand from Vertex Form to Standard Form. \_\_2K**
- c) State the y-intercept. \_\_1K**

12)  $y = 5(x + 6)^2 - 12$

**Do these steps:**

- a) Fill in these blanks: a= \_\_\_\_ h= \_\_\_\_ k= \_\_\_\_ \_\_3K**
- b) Write the original table of values for  $y = x^2$ . \_\_1C**
- c) Write the transformed table of values using a, h, and k. \_\_2C**
- d) Graph! \_\_1C**

13)  $y = 2(x - 4)^2 + 1$

