

READY, SET, GO!

Name

Period

Date

**READY**

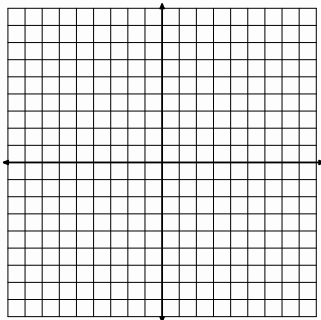
Topic: Graphing lines using the intercepts

**Find the x-intercept and the y-intercept. Then graph the equation.**

1.  $3x + 2y = 12$

a. x-intercept:

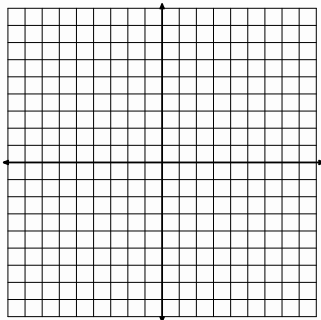
b. y-intercept:



2.  $8x - 12y = -24$

a. x-intercept:

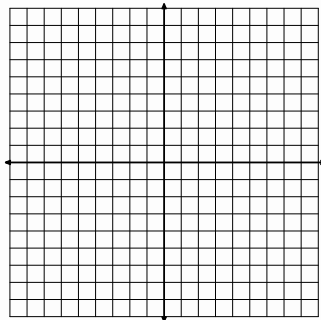
b. y-intercept:



3.  $3x - 7y = 21$

a. x-intercept:

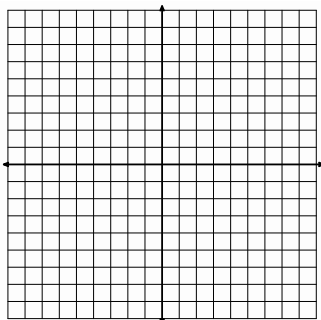
b. y-intercept:



4.  $5x - 10y = 20$

a. x-intercept:

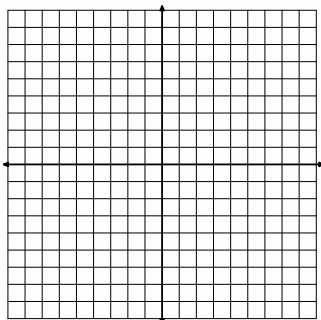
b. y-intercept:



5.  $2y = 6x - 18$

a. x-intercept:

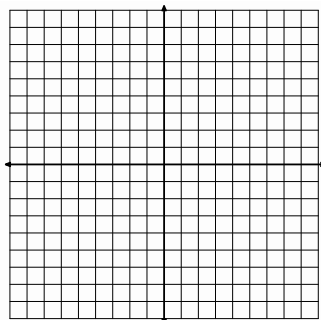
b. y-intercept:



6.  $y = -6x + 6$

a. x-intercept:

b. y-intercept:



**SET**

Topic: Completing the square by paying attention to the parts

**Multiply. Show each step. Circle the pair of like terms before you simplify to a trinomial.**

7.  $(x + 5)(x + 5)$     8.  $(3x + 7)(3x + 7)$     9.  $(9x + 1)^2$     10.  $(4x + 11)^2$

11. Write a rule for finding the coefficient “B” of the x-term (the middle term) when multiplying and simplifying  $(ax + q)^2$ .

**In problems 12 – 17,**

**(a) Fill in the number that completes the square.**

**(b) Then write the trinomial as the product of two factors.**

12. a)  $x^2 + 8x + \underline{\hspace{2cm}}$

b)

13. a)  $x^2 + 10x + \underline{\hspace{2cm}}$

b)

14. a)  $x^2 + 16x + \underline{\hspace{2cm}}$

b)

15. a)  $x^2 + 6x + \underline{\hspace{2cm}}$

b)

16. a)  $x^2 + 22x + \underline{\hspace{2cm}}$

b)

17. a)  $x^2 + 18x + \underline{\hspace{2cm}}$

b)

**In problems 18 – 26,**

**(a) Find the value of “B,” that will make a perfect square trinomial.**

**(b) Then write the trinomial as a product of two factors.**

18.  $x^2 + Bx + 16$

a)

b)

19.  $x^2 + Bx + 121$

a)

b)

20.  $x^2 + Bx + 625$

a)

b)

21.  $x^2 + Bx + 225$

a)

b)

22.  $x^2 + Bx + 49$

a)

b)

23.  $x^2 + Bx + 169$

a)

b)

24.  $x^2 + Bx + \frac{25}{4}$

a)

b)

25.  $x^2 + Bx + \frac{9}{4}$

a)

b)

26.  $x^2 + Bx + \frac{49}{4}$

a)

b)

**GO**

Topic: Features of horizontal and vertical lines

**Find the intercepts of the graph of each equation. State whether it’s an x- or y- intercept.**

27.  $y = -4.5$

28.  $x = 9.5$

29.  $x = -8.2$

30.  $y = 112$