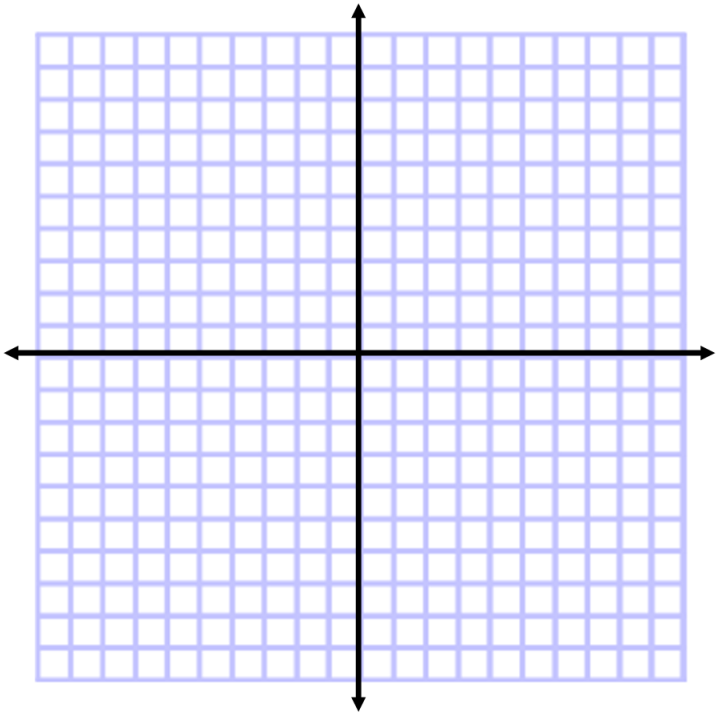
Honors math II
Unit 4 day 5 notes

Name_____

# Bellwork



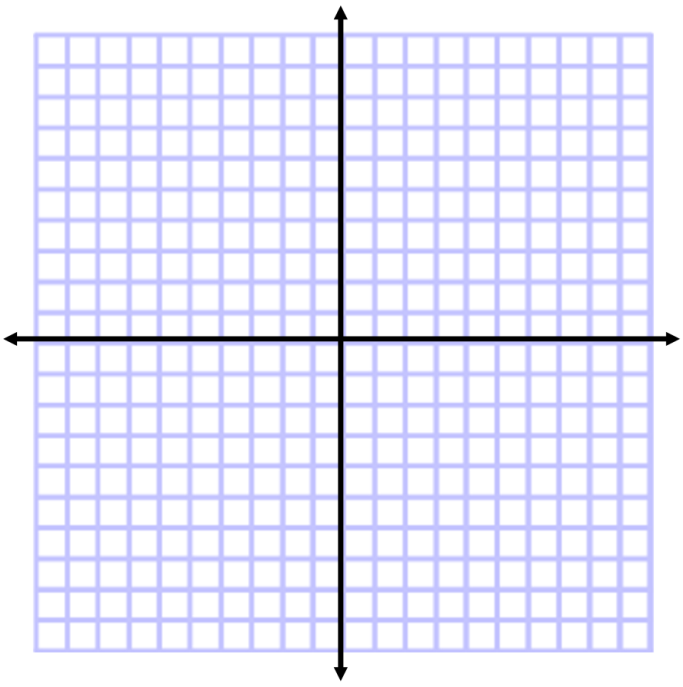
Graph $y = x^2 - 2x - 3$

vertex form:

intercept form:

Domain:

Range:



Graph $y = -2(x - 1)(x + 3)$

standard form:

vertex form:

x-intercept(s):

y-intercept:

# Quick review

Solve:

$4(x - 4)^2 = 24$

$3(x + 10)^2 - 21 = 0$

$x^2 - 8x - 20 = 0$

$3x^2 - 13x = 10$

What makes the following 2 expressions a perfect square trinomial?

$x^2 + 8x + 16$

$x^2 + 12x + 36$

Find the value of "c" that makes the expression a perfect square trinomial. Then write the expression as the square of a binomial.

$x^2 + 10x + c$

$x^2 - 14x + c$

$x^2 - 3x + c$

$x^2 + 5x + c$

Solve by completing the square.

$x^2 - 10x + 22 = 0$

$x^2 + 12x - 54 = 0$

$x^2 - 8x = -8$

$2x^2 + 28x = -36$

$3x^2 - 12x + 4 = 0$

$5x^2 + 20x + 2 = 0$

Write in vertex form by using completing the square method:

$y = x^2 - 10x - 20$

$y = 3x^2 - 6x + 1$

$y = x^2 + 4x + 5$

$y = 3x^2 - 12x + 7$