

98

Activity: What's My Quadratic Name in Standard form: $y = ax^2 + bx + c$?

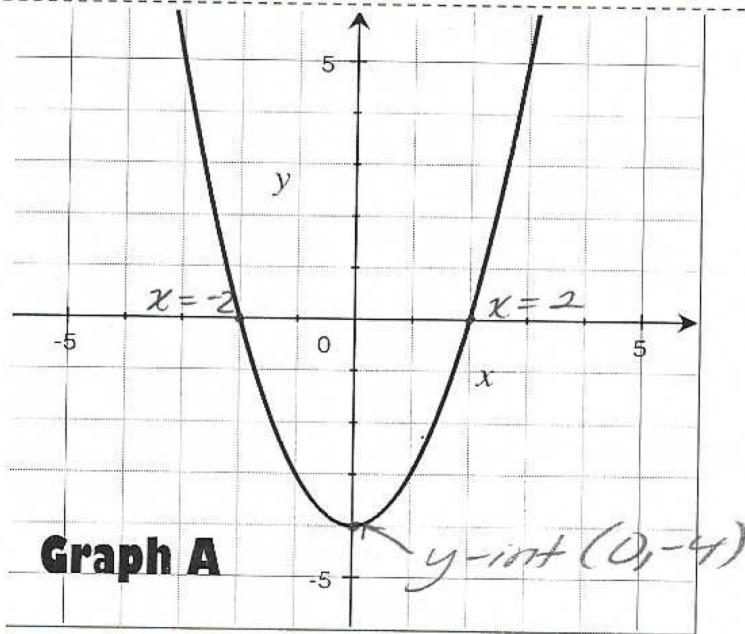
Name: _____

Alg. 1 H – Jan. 8

Key

Glue on page 92

Created for you by Ms. Nhetseubanh



The zeros(roots) are:

$$x = \frac{-2}{\cancel{x+2}}, x = \frac{2}{\cancel{x-2}}$$

Factors $(x+2)(x-2) = 0$

$$x(x-2) + 2(x-2) = 0 \quad \text{distributive}$$

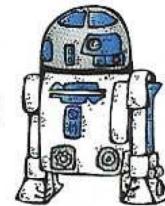
$$x^2 - 2x + 2x - 4 = 0 \quad \text{method}$$

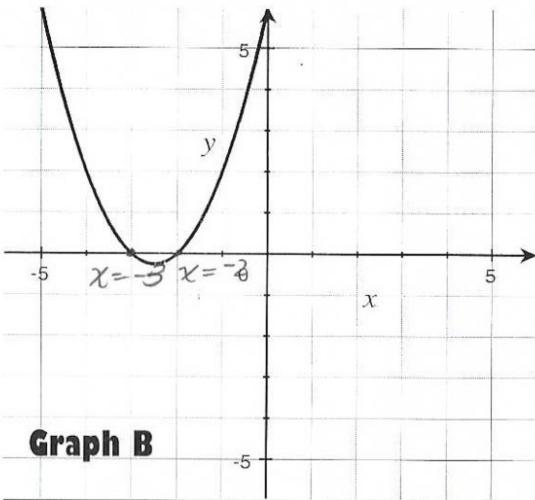
Equation: $y = x^2 - 4$

y-intercept = $(0, -4)$

$$y = x^2 - 4$$

R-2D2





Graph B

The zeros(roots) are:

$$x = \underline{-3}, x = \underline{-2}$$

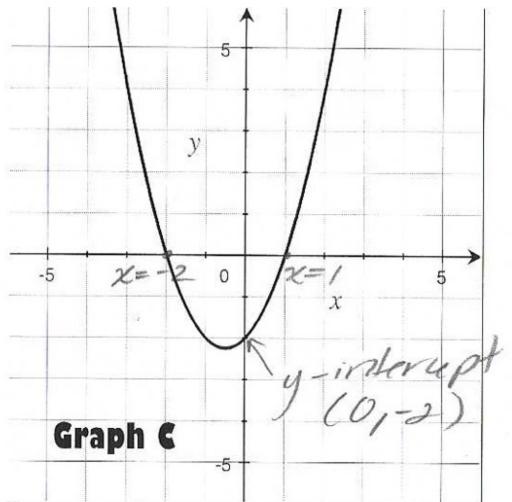
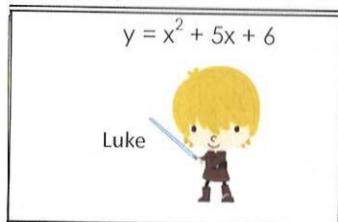
Factors $(x+3)(x+2) = 0$

$$x(x+2) + 3(x+2) = 0$$

$$x^2 + 2x + 3x + 6 = 0$$

Equation: $y = x^2 + 5x + 6$

y-intercept = (0, 6) "C" \rightarrow y-intercept



Graph C

The zeros(roots) are:

$$x = \underline{-2}, x = \underline{1}$$

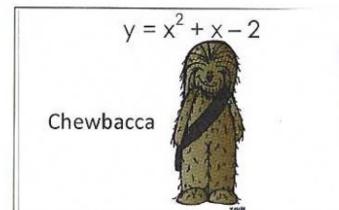
Factors $(x+2)(x-1) = 0$

$$x(x-1) + 2(x-1) = 0$$

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

Equation: $y = x^2 + x - 2$

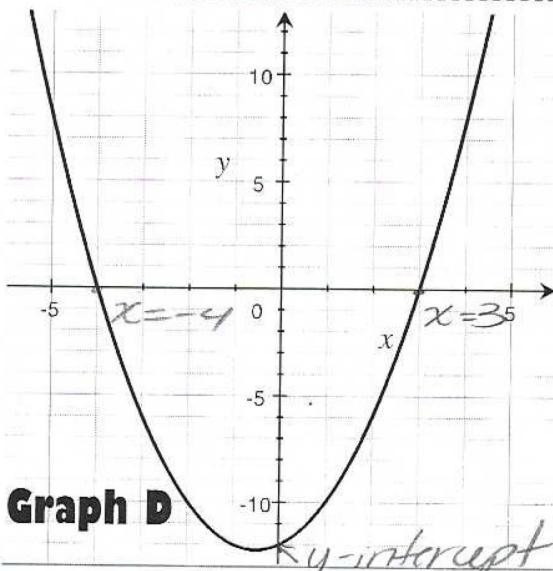
y-intercept = (0, -2)



Activity: What's My Quadratic Name in Standard form: $y = ax^2 + bx + c$?

Name: Kay
Alg. 1 H - Jan. 8 Glue on page 93

Created for you by Ms. Nhetseubanh



Graph D

The zeros(roots) are:

$$x = \underline{-4}, x = \underline{3}$$

Factors $(x + 4)(x - 3) = 0$

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

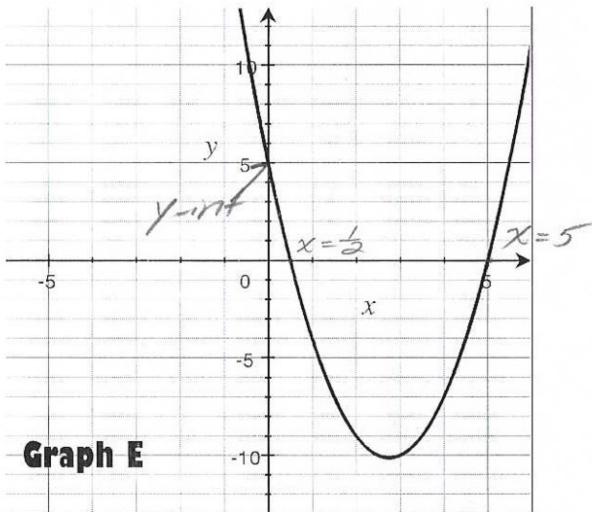
Box method

Equation: $y = x^2 + 1x - 12$

y-intercept = (0, -12) $y = x^2 + x - 12$

Yoda





Graph E

The zeros(roots) are:

$$x = \frac{1}{2}, x = 5$$

Factors $(x - \frac{1}{2})(x - 5) = 0$

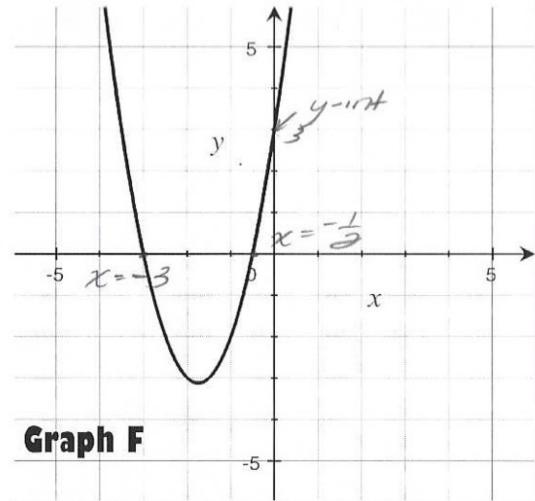
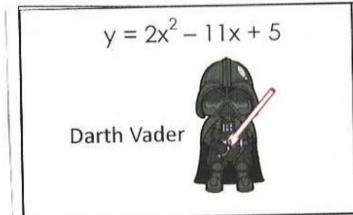
$$(2x - 1)(x - 5) = 0$$

$$2x(x - 5) - 1(x - 5)$$

$$\cancel{2x^2} - 10x - 1x + 5$$

$$\text{Equation: } y = 2x^2 - 11x + 5$$

$$\text{y-intercept} = (0, 5)$$



Graph F

The zeros(roots) are:

$$x = -3, x = -\frac{1}{2}$$

Factors $(x + 3)(x + \frac{1}{2}) = 0$

$$(x + 3)(2x + 1) = 0$$

x	$+3$
$2x$	$2x^2 + 2x$

$$\text{Equation: } y = 2x^2 + 7x + 3$$

$$\text{y-intercept} = (0, 3)$$

