zeroes, y-intercept, vertex, graph..ks-ia1 - Infinite Algebra 1

File Edit View Modify Utilities Help

Zoom: 100% Desired Length Columns: 2

Filter Index Order

Absolute value
Equations, graphing
Equations, solving
Inequalities
Bar graphs
Reading
Box-and-whisker plots
Drawing
Combining like terms
Completing the square
By finding the constant
Solving equations by
Correlation
Custom question
Discriminant

3.41 pages
8 questions

Current question sets (3):

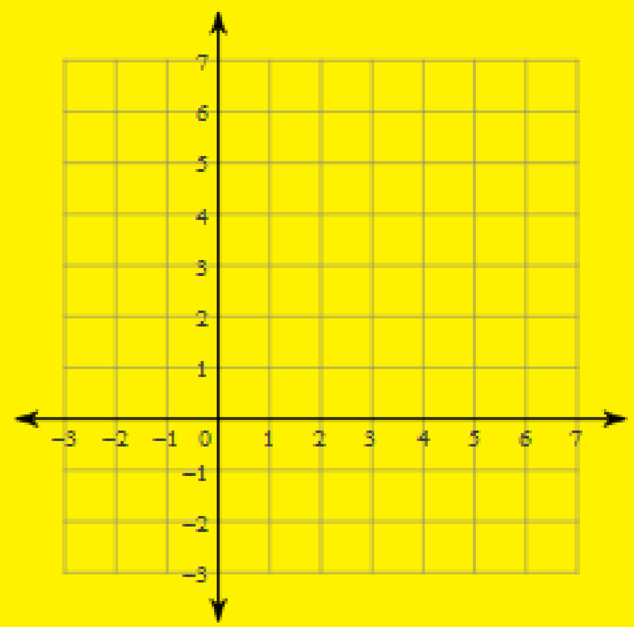
6 × Graphing Quadratic Functions
1 × Graphing Quadratic Functions
1 × Graphing Quadratic Functions
0 × Graphing Quadratic Functions

Math 11C Name________________________________

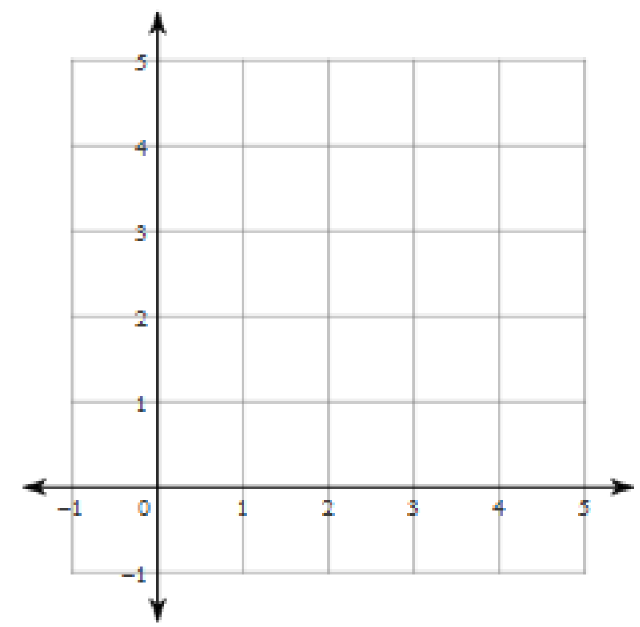
Zeroes, Y-Intercept, Vertex, Graph;

Sketch the graph of each function.

1) $y = 2x^2 - 8x + 6$



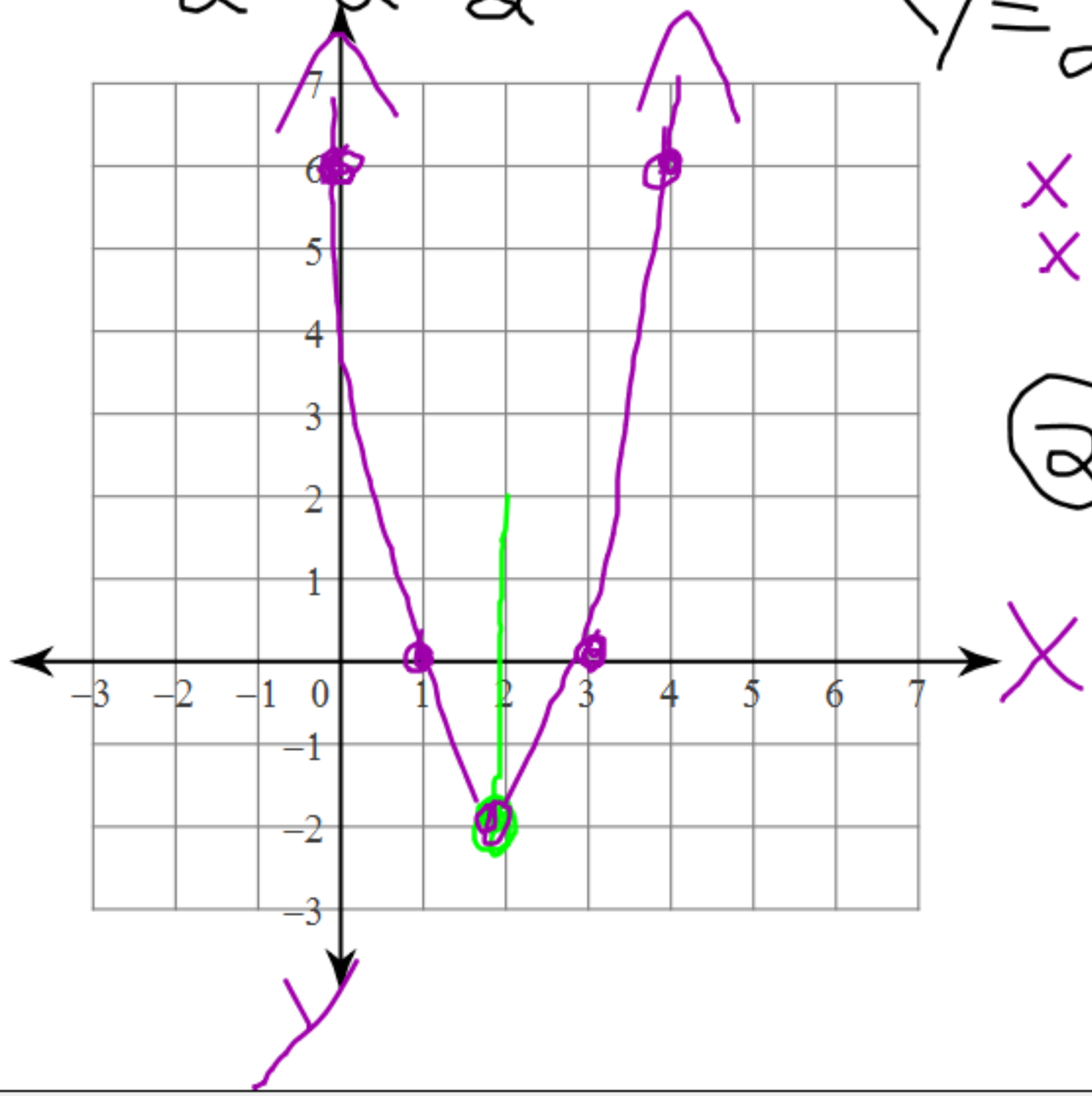
2) $y = -x^2 + 4x$



9:29 AM
11/22/2017

Sketch the graph of each function.

1) $y = \frac{2x^2}{2} - \frac{8x}{2} + \frac{6}{2}$



① Factor to find 0's

$y = 2(x^2 - 4x + 3)$

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

× 3, + −4, −1, −3

$x - 1 = 0$ $\quad x - 3 = 0$

$x = 1$ $\quad x = 3$

$\therefore \{1, 3\}$

② y-intercept:

$y = 2x^2 - 8x + 6$

$y = 2(0)^2 - 8(0) + 6$

$y = 6$

$(0, 6)$

③ Find Vertex (a.o.s)

$y = 2x^2 - 8x + 6$

$y = 2(2)^2 - 8(2) + 6$

$y = 8 - 16 + 6$

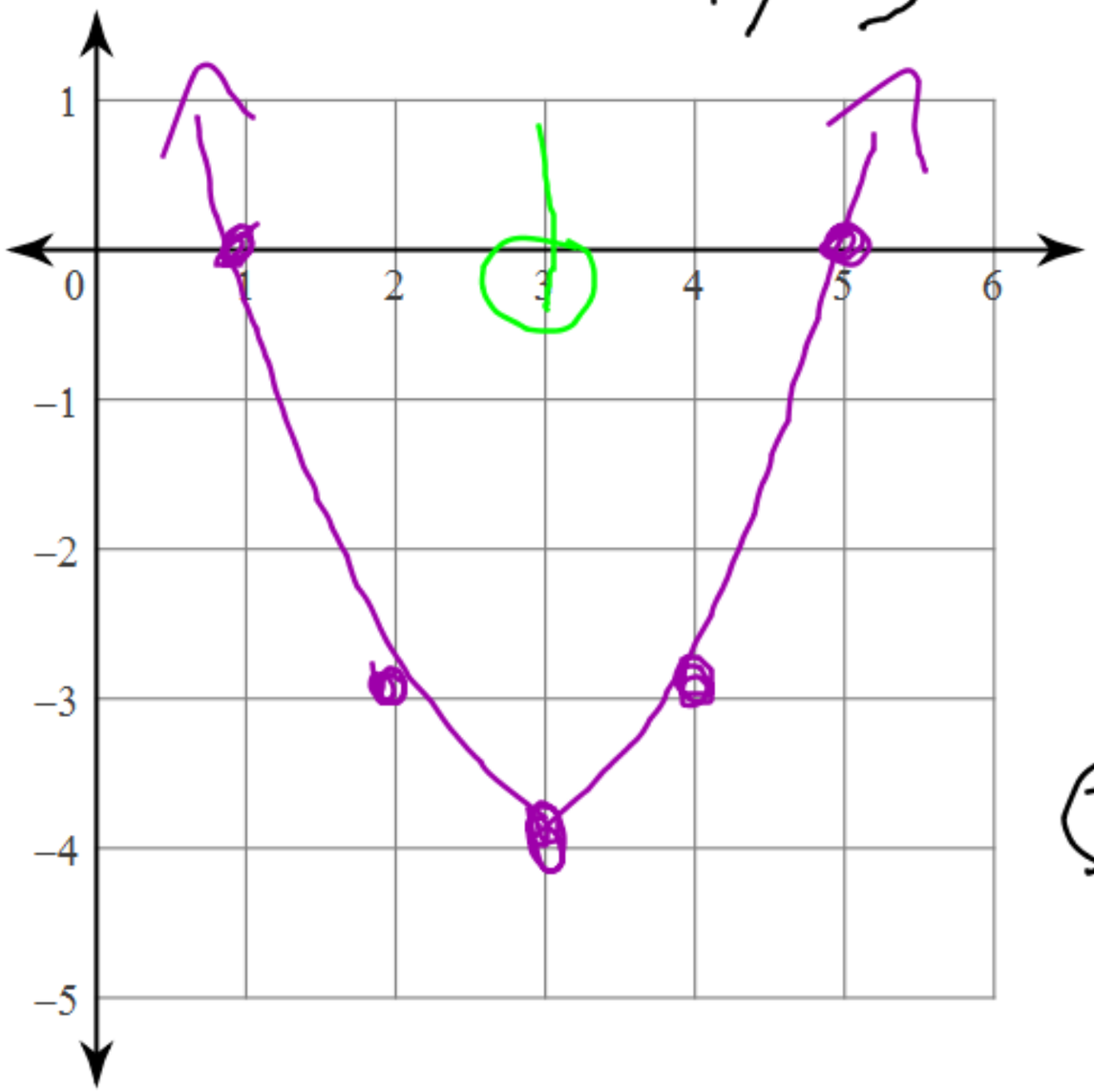
$y = -2$

vertex $(2, -2)$

Sketch the graph of each function.

8.

3) $y = x^2 - 6x + 5$



(x) 5
(+) −6
−1, −5

① Find zeros

$y = (x-1)(x-5)$

$x-1=0$ → $x=1$

$x-5=0$ → $x=5$

s.s {1, 5}

② y-intercept

$y = (0)^2 - 6(0) + 5$

$y = 5$

(0, 5)

③ Vertex

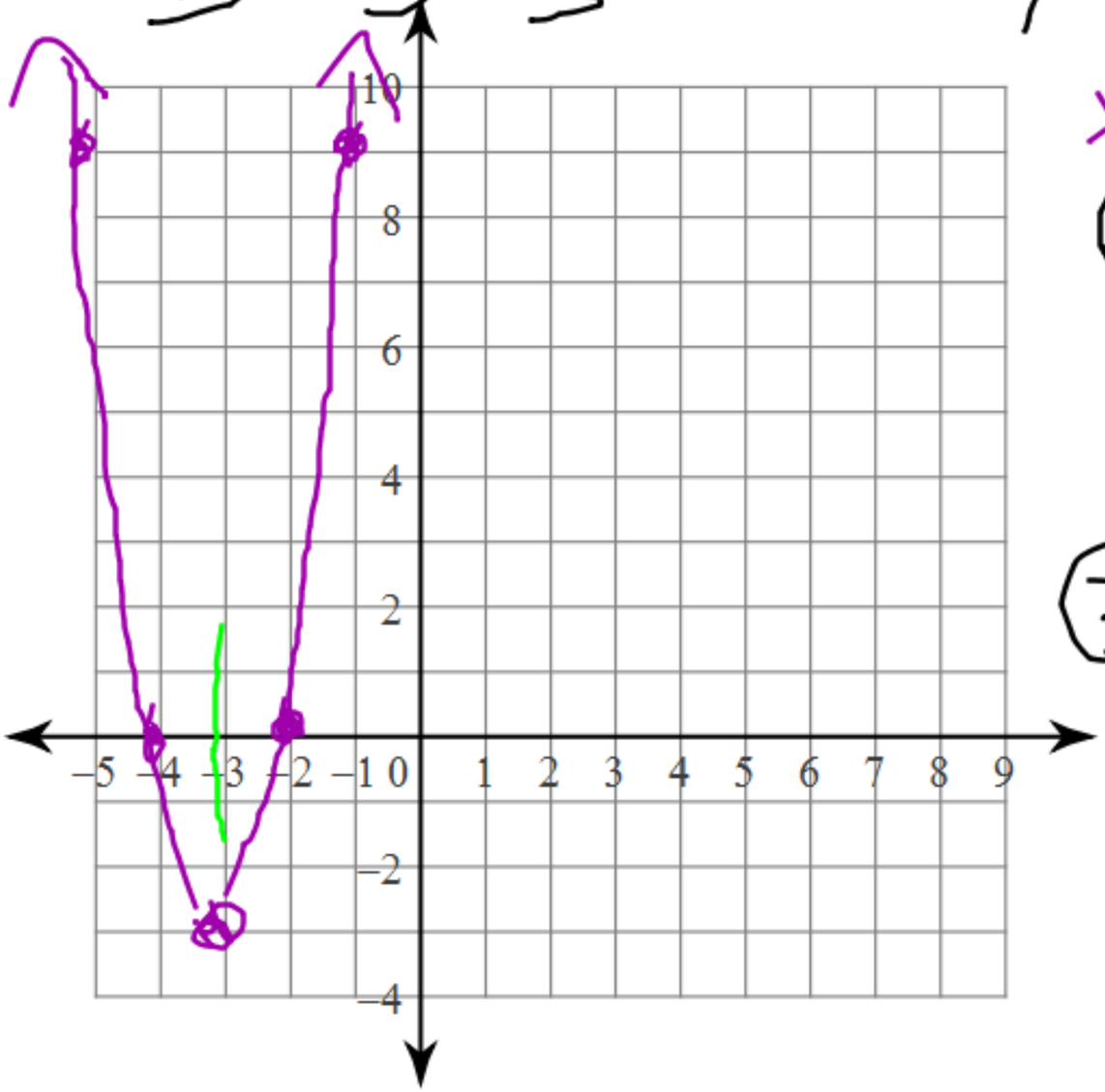
$y = 3^2 - 6(3) + 5$

$y = -4$

(3, −4)

Sketch the graph of each function.

4) $y = \frac{3x^2}{3} + \frac{18x}{3} + \frac{24}{3}$



① Zeroes

$y = 3(x^2 + 6x + 8)$

$y = 3(x+4)(x+2)$

$x = -4$ $x = -2$

⊗ 8
⊕ 6
4, 2

② y-intercept

$y = 3(0)^2 + 18(0) + 24$

$y = 24$ (0, 24)

③ vertex

$y = 3(-3)^2 + 18(-3) + 24$

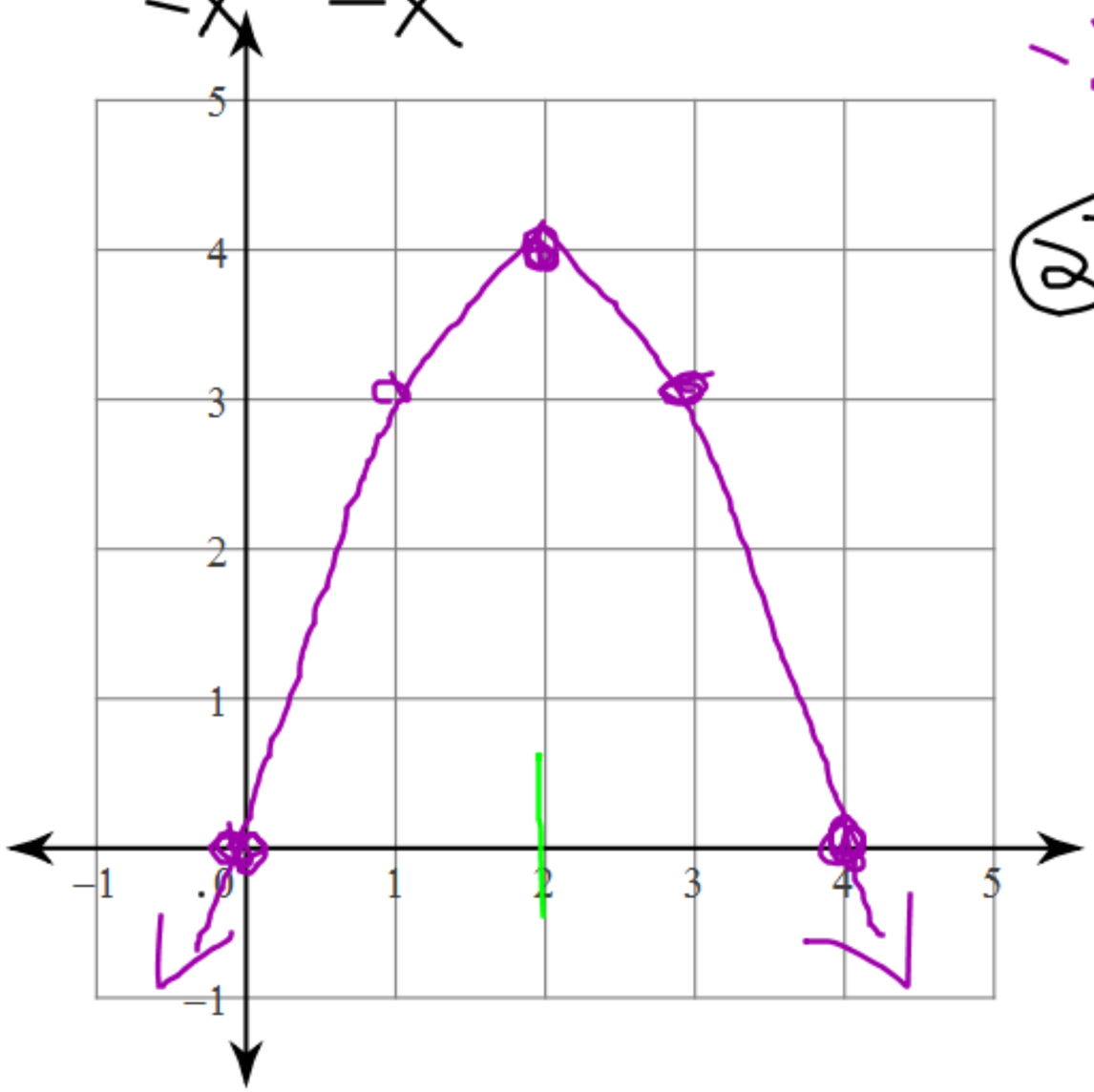
$y = 27 - 54 + 24$

$y = -3$

(−3, −3)

Sketch the graph of each function.

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



① Find zeroes:

$y = -x(x - 4)$

$-x = 0$ $\quad x - 4 = 0$

$x = 0$ $\quad x = 4$

$S.S \{0, 4\}$

② Find y-intercept

$y = -(0)^2 + 4(0)$

$y = 0$

$(0, 0)$

③ vertex $(a \cdot 0 \cdot 5)$

$y = -(2)^2 + 4(2)$

$y = -4 + 8$

$y = 4$ vertex $(2, 4)$