

Math II

① GRAPH CAREFULLY! $y = 2(x-4)^2 - 3$
 (without Technology)

STATE: Domain
 Range
 Vertex
 Axis of Symm.
 y-intercept

ESTIMATE x intercepts

② Without Graphing (hint-Complete the square!)

State:

- ✓ Direction of opening $y = (x^2 - 8x) + 12$
- ✓ Vertex $(4, -4)$ $(8, 7)$ $y = (x^2 - 8x + 16) - 16 + 12$
- ✓ Axis of symm. $x = 4$ $x = 8$
- ✓ max/min $\text{min of } -4$ $y = (x-4)^2 - 4$
- ✓ y-intercept 12 or $(0, 12)$

$$y = (x-8)^2 + 7$$

③ Find the equation in VERTEX AND STANDARD Form of the parabola with a vertex of $(1, 3)$ passing through the point $(2, -1)$

$$y = a(x - p)^2 + q$$

$$y = a(x - 1)^2 + 3 \quad \frac{1}{3}$$

$$-1 = a(2 - 1)^2 + 3$$

$$-1 = a + 3$$

$$a = -4$$

$$y = -4(x - 1)^2 + 3$$

1/3

2/3

✓ 3/3

Now for standard form:

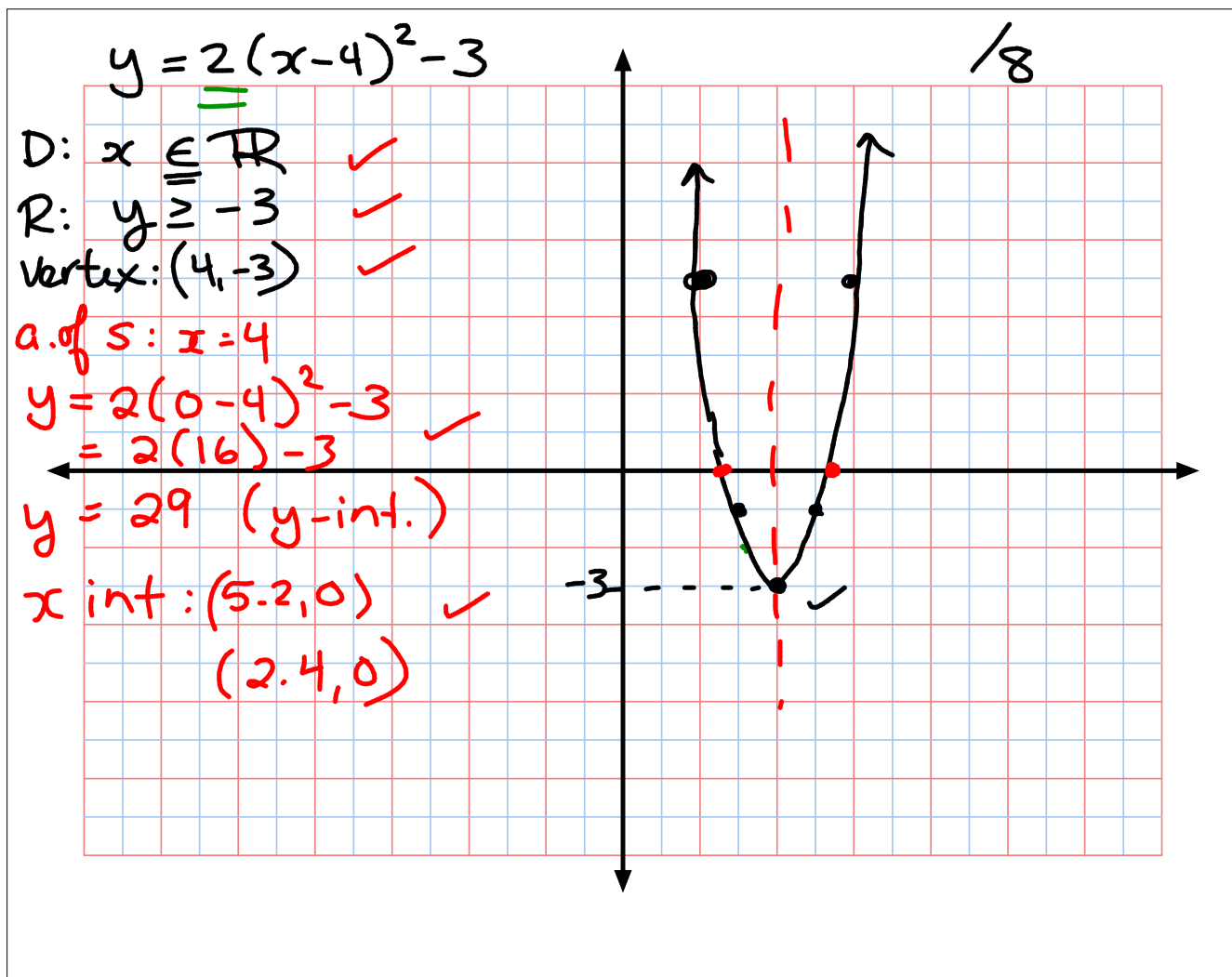
$$y = -4(x - 1)(x - 1) + 3$$

$$y = -4(x^2 - 2x + 1) + 3$$

$$y = -4x^2 + 8x - 4 + 3$$

$$y = -4x^2 + 8x - 1$$

2/2.



Math 11

- ✓ 3 Chapter 3 Review Questions
(eerily similar to ones you might face on the unit test)

◦ Work/Catch-up

Finish all
of Ch3!!

→ we are Moving on on
TUESDAY