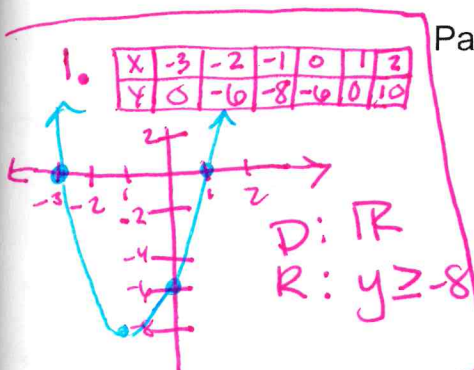


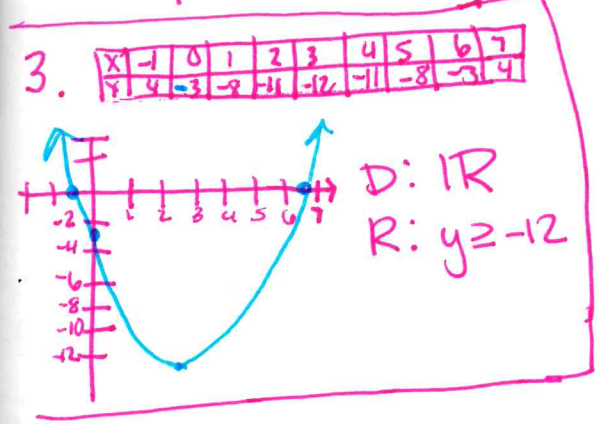
Day 1 Homework

Page 549 #1-16 odd



5. Vertex $(-1, 5)$
axis of symmetry $x = -1$
y-intercept $(0, 3)$

6. Vertex $(-2, -4)$
axis of symmetry $x = -2$
y-intercept $(0, -4)$



9. Vertex $(1, 2)$
axis of symmetry $(x = 1)$
y-intercept $(0, -1)$

11. Vertex $(2, 1)$
axis of sym $x = 1$
y-intercept $(0, 5)$

13. a) max
b) 1
c) $D = \mathbb{R}$
 $R = y \leq 1$

15. a) max
b) 6
c) $D = \mathbb{R}$
 $R = y \leq 6$

Graphing a Quadratic using its characteristics.

1. Find the equation of axis of symmetry
2. Find the vertex, and determine whether it is a min or max
3. Find the y-intercept
4. Use symmetry to find additional points for your graph
5. Connect the points with a smooth curve.

Students try

Graph $f(x) = x^2 + 4x + 3$

axis of symmetry

$$x = -\frac{b}{2a} = -\frac{4}{2(1)} = -\frac{4}{2} = -2$$

Vertex

$$f(-2) = (-2)^2 + 4(-2) + 3 = 4 - 8 + 3 = -1$$

$(-2, -1)$ min

3) y-intercept $(0, 3)$

4) use y-intercept / Symmetry
a. find a point on

