Math-2 Name_____ ID: 1
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SM2 HW #5-5 (convert to vertex form)

Date_____ Period____

1) Determine the slope intercept form equation that passes through: $(-1, 5)$ and $(2, -5)$

2) State the Domain and Range of the function in interval form:

$y = -3\sqrt{x + 6} - 3$

For problems 3 through 6
a) Convert to intercept form
b) List the x-intercepts.

3) $x^2 + 11x + 28 = 0$

4) $x^2 - 7x + 10 = 0$

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

6) $5x^2 - 32x + 12 = 0$

a) Convert the following equations to vertex form.

b) Solve the resulting equations by taking square roots.

7) $x^2 - 8x - 23 = 0$

8) $x^2 + 10x + 4 = 0$

9) $x^2 + 4x - 20 = 0$

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

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11) $x^2 + 4x - 97 = 0$

12) $x^2 - 4x - 51 = 0$

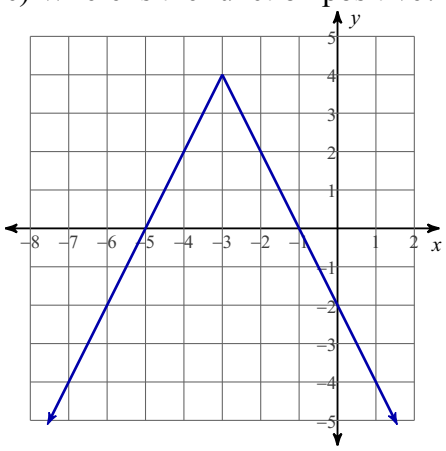
13) $x^2 + 6x - 81 = 0$

14) $x^2 + 8x + 13 = 0$

15) a) What is the equation represented by the graph?

b) What is the range?

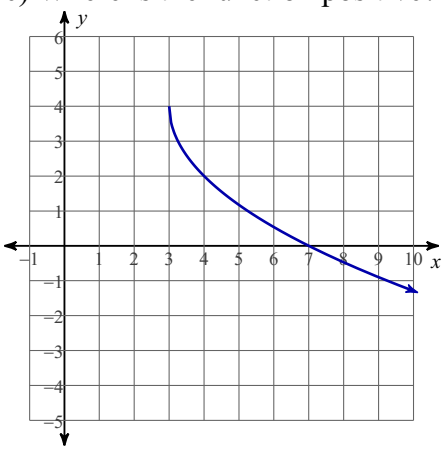
c) Where is the function positive?



16) a) What is the equation represented by the graph?

b) What is the range?

c) Where is the function positive?



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