

SM2 HW #5-2 (Intercept Form)

Date _____ Period _____

For problems 1-8:

- a) Convert the equation to intercept form by factoring.
- b) What are the x-intercepts?
- c) Find the vertex using the method I taught in the notes.
- d) Write the vertex form equation.

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

2) $y = x^2 - 14x + 40$

3) $y = x^2 + 10x + 16$

4) $y = x^2 + 4x - 32$

5) $y = 2x^2 - 12x + 18$

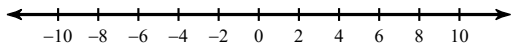
6) $y = x^2 - x - 12$

7) $y = x^2 + 10x + 21$

8) $y = x^2 - 6x - 16$

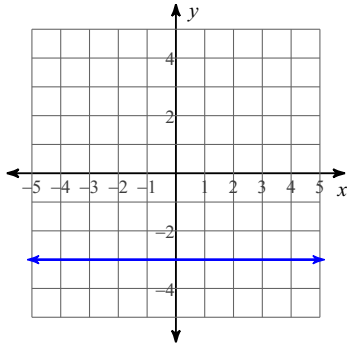
Solve each inequality and graph its solution.

9) $-3|2v| - 8 \geq -68$

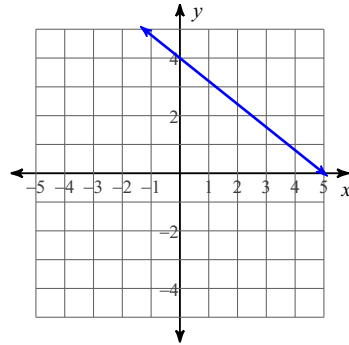


Write the slope-intercept form of the equation of each line.

10)



11)



Find each product.

12) $(7p - 3)(7p + 3)$

13) $(2v - 7)^2$