

Name _____

Period _____ Date _____

Homework 5.2.5 #2

1) Solve the following quadratic equation twice. $x^2 + 6x + 1 = 0$ Show your work.

a) Using the Quadratic Formula

b) By Completing the Square

2) Solve the following quadratic equations using any method of your choice.

a) $100x^2 - 9 = 0$

b) $9x^2 + 34x = 8$

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

d) $0.2x^2 - 9 + 3.2x = 0$

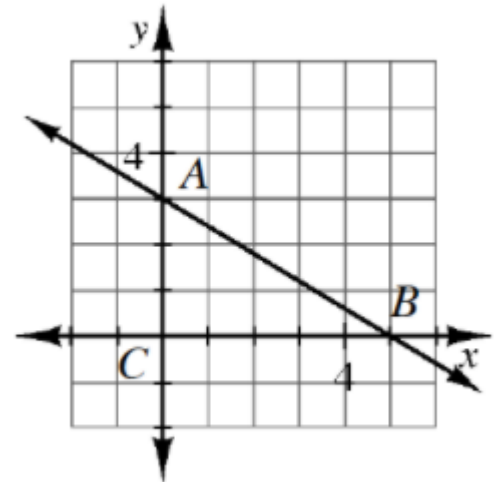
3) Examine the graph of line \overleftrightarrow{AB} at right.

- a) What is the slope of the line? _____
- b) What is the y-intercept of the line? _____
- c) Write the equation of the line: _____
- d) What is the slope of a line parallel to \overleftrightarrow{AB} ? _____

e) Write the equation of a line parallel to \overleftrightarrow{AB} through point C

f) What is the slope of a line perpendicular to \overleftrightarrow{AB} ?

g) Write the equation of a line perpendicular to \overleftrightarrow{AB} through point A



4) Lori has written the conjectures below. For each one, decide if it is true or not. If you believe it is not true, provide a counterexample (an example that proves that the statement is false).

Statement	True or False? If false, provide a counterexample
a) If a triangle has a 60° angle, it must be an equilateral triangle.	
b) To calculate the area of a shape, you always multiply the length of the base by the height.	
c) All shapes have 360° rotation symmetry.	