Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

Algebra 1 PTech

Warm Up

1. Let *f* be the function represented by the graph below.



Let *g* be a function such that . Determine which function has the larger maximum value. Justify your answer.

2. The table below represents the residuals for a line of best fit.

**

Plot these residuals on the set of axes below.



Using the plot, assess the fit of the line for these residuals and justify your answer.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

Algebra 1 PTech

Cool Down

1. A student was given the equation  to solve by completing the square. The first step that was written is shown below.



The next step in the student’s process was . State the value of *c* that creates a perfect square trinomial. Explain how the value of *c* is determined.

2. On the axes below, graph .

If , how is the graph of  translated to form the graph of ? If , how is the graph of  translated to form the graph of ?

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

Algebra 1 PTech



Unit 11 Lesson 8

Homework

1. The formula for the area of a trapezoid is . Express  in terms of *A*, *h*, and . The area of a trapezoid is 60 square feet, its height is 6 ft, and one base is 12 ft. Find the number of feet in the other base.

2. Let  and . On the set of axes below, draw the graphs of  and .

Using this graph, determine and state *all* values of *x* for which .