

Unit 0 HW #2

HONORS ALGEBRA 2



- Junior is saving money in his piggy bank. He starts with 10 cents and adds two pennies each day. Create an $x \rightarrow y$ table and a graph for the function for which x represents the number of days since Junior started saving money and y represents the total money he has saved.
- Use the Zero Product Property and factoring, when necessary, to solve for x . The Math Notes box for Lesson 0.1.4 may be useful, if you need help.
 - $x^2 - 5x = 0$
 - $x^2 - 2x - 35 = 0$
 - $3x^2 + 14x - 5 = 0$
- Natalie graphed a line with a slope of 5 and a y -intercept of $(0, -2)$.
 - Find an equation for her line.
 - Find the value of x when $y = 0$.
- In each of the following equations, what is y when $x = 2$? When $x = 0$? Where would the graph of each equation cross the y -axis?
 - $y = 3x + 15$
 - $y = 3 - 3x$
- Note: The stoplight icon to the right of a problem indicates that there is an error in the problem. Find the error in the solution below. Explain what the error is and solve the equation correctly. Show how to check your solution to be sure that it is correct.

$$3(x - 2) - 2(x + 7) = 2x + 17$$

$$3x - 6 - 2x + 14 = 2x + 17$$

$$x + 8 = 2x + 17$$

$$-9 = x$$

