### Lesson 13 Practice Problems

1. The polynomial function has a known factor of . Rewrite as a product of linear factors.
2. Let the function be defined by where is a factor. To rewrite the function as the product of two factors, long division was used but an error was made:

* How can we tell by looking at the remainder that an error was made somewhere?

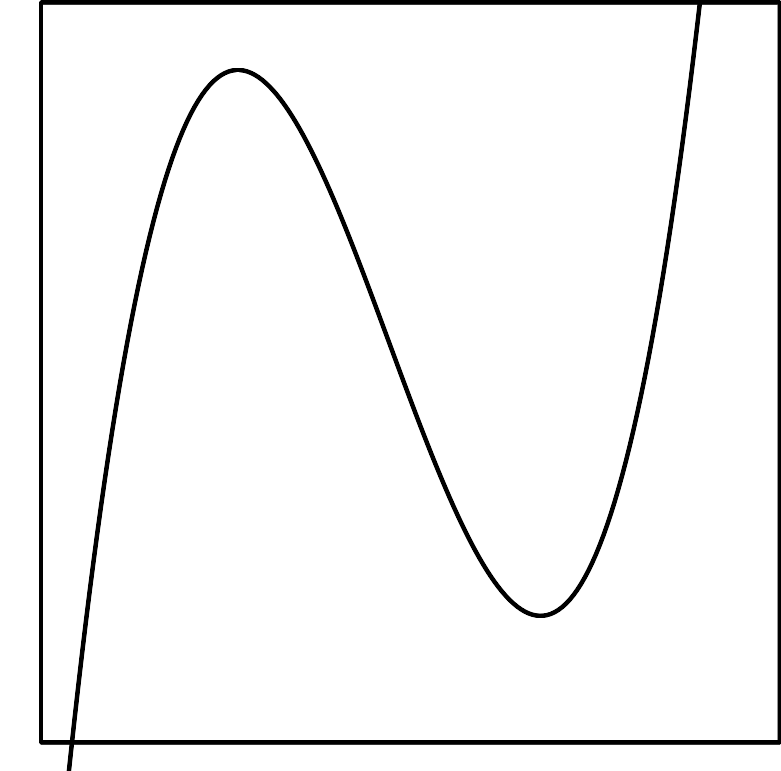
1. For the polynomial function we know is a factor. Select **all** the other linear factors of .
2. Match the polynomial function with its constant term.
   1. -210
   2. -42
   3. 21
   4. 42
   5. 210

* (From Unit 2, Lesson 6.)

1. What are the solutions to the equation ?

* (From Unit 2, Lesson 11.)

1. The graph of a polynomial function is shown. Which statement is true about the end behavior of the polynomial function?

* 
  1. As gets larger and larger in the either the positive or the negative direction, gets larger and larger in the positive direction.
  2. As gets larger and larger in the positive direction, gets larger and larger in the positive direction. As gets larger and larger in the negative direction, gets larger and larger in the negative direction.
  3. As gets larger and larger in the positive direction, gets larger and larger in the negative direction. As gets larger and larger in the negative direction, gets larger and larger in the positive direction.
  4. As gets larger and larger in the either the positive or negative direction, gets larger and larger in the negative direction.
* (From Unit 2, Lesson 8.)

1. The polynomial function has a known factor of .
   1. Rewrite as the product of linear factors.
   2. Draw a rough sketch of the graph of the function.

* (From Unit 2, Lesson 12.)



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