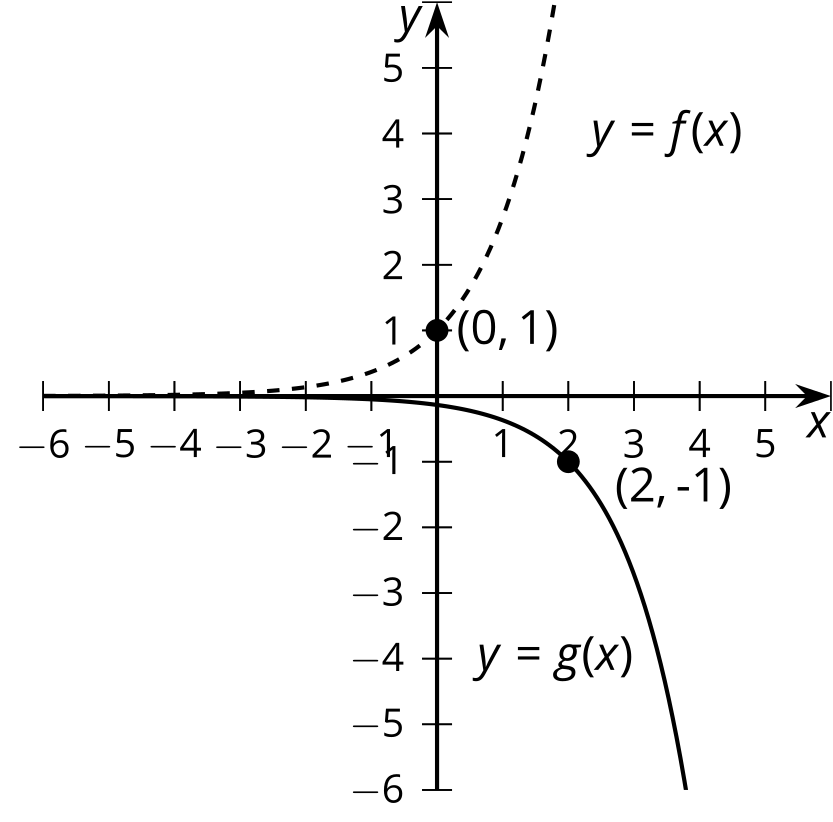
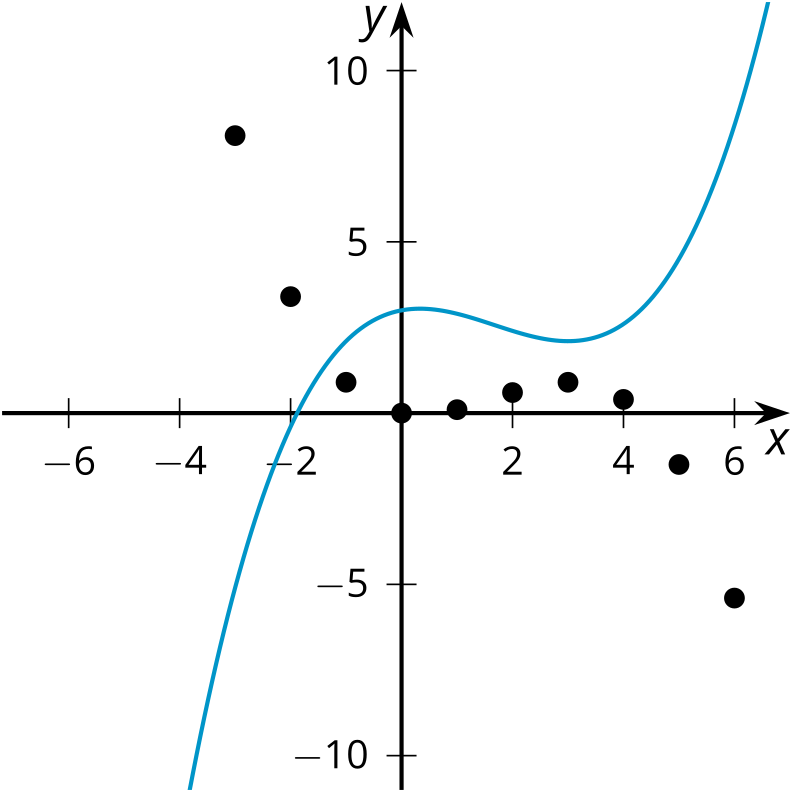
### Lesson 7 Practice Problems

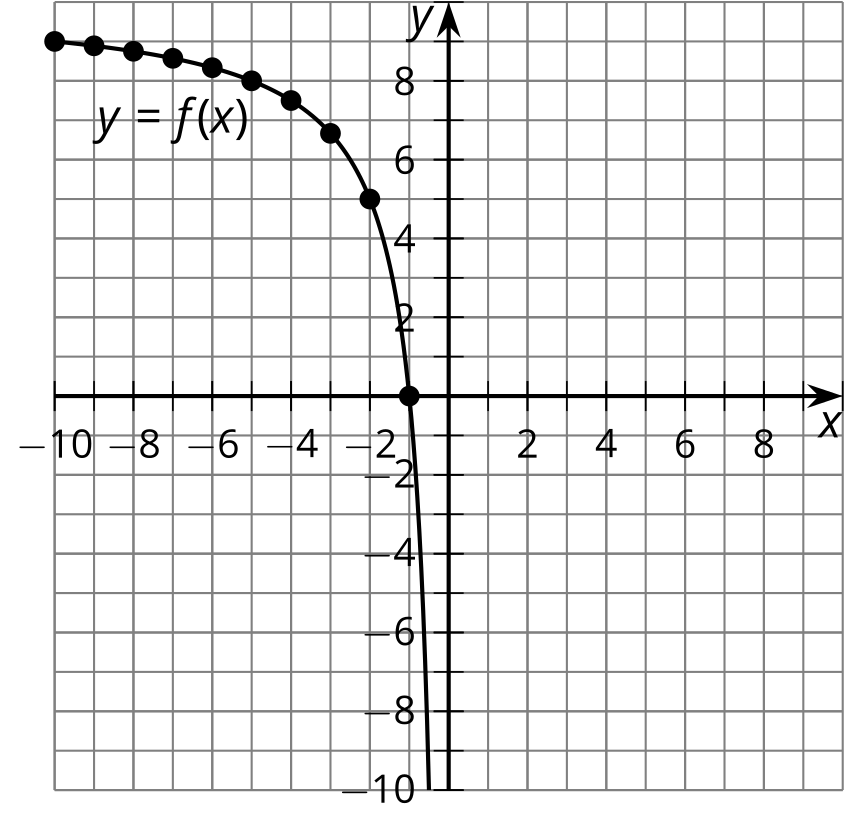
1. Here is a graph of and a graph of , which is a transformation of . Write an equation for the function .

* 

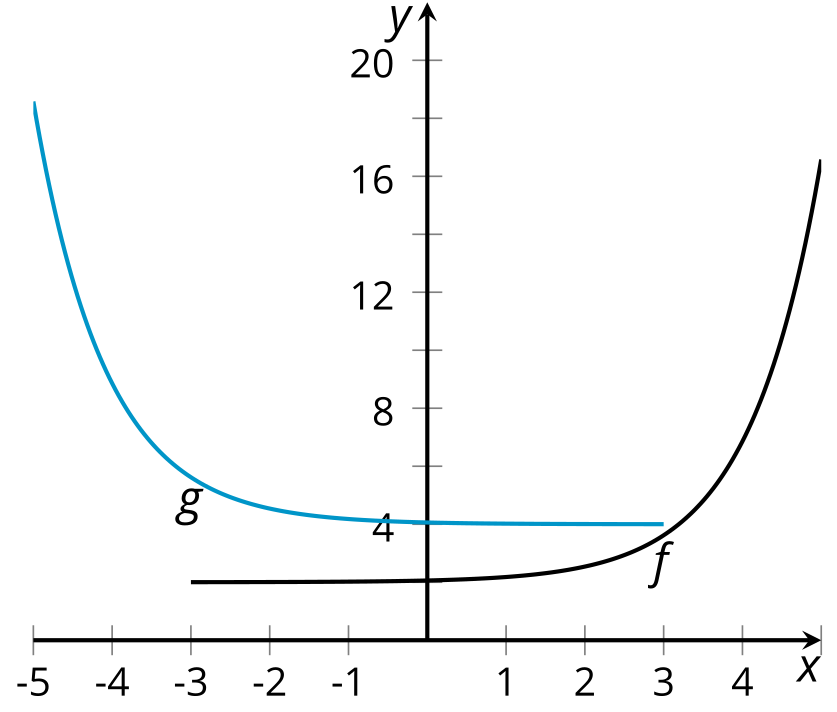
1. Describe the transformation that takes the graph of function to the graph of function .
   1. and
   2. and
   3. and
   4. and
   5. Write an equation whose graph is a parabola with vertex at and which opens upward.
   6. Write an equation whose graph is a parabola with vertex at and which opens downward.
2. Describe how to move the graph so that it better matches the data.

* 
* (From Unit 5, Lesson 1.)

1. Here is a graph of for . Sketch for if:
   1. is even
   2. is odd
   3. is neither even nor odd

* 
* (From Unit 5, Lesson 6.)

1. Here are graphs of functions and .

* Which sequences of transformations take the graph of to the graph of ? Select **all** that apply.
* 
  1. reflection over the -axis, then translation up by 2
  2. reflection over the -axis, then translation up by 2
  3. translation up 2, then reflection over the -axis
  4. translation up 2, then reflection over the -axis
  5. translation up 2, and then translation left by 5
* (From Unit 5, Lesson 4.)



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