### Lesson 8 Practice Problems

1. Classify the graph of the equation .
   1. circle
   2. exponential curve
   3. line
   4. parabola
2. Write an equation that states is the same distance from as it is from the -axis.
3. Select **all** equations which describe the parabola with focus  and directrix .
4. Parabola A and parabola B both have the -axis as the directrix. Parabola A has its focus at and parabola B has its focus at . Select **all** true statements.
   1. Parabola A is wider than parabola B.
   2. Parabola B is wider than parabola A.
   3. The parabolas have the same line of symmetry.
   4. The line of symmetry of parabola A is to the right of that of parabola B.
   5. The line of symmetry of parabola B is to the right of that of parabola A.

* (From Unit 6, Lesson 7.)

1. A parabola has focus and directrix . Where is the parabola’s vertex?

* (From Unit 6, Lesson 7.)

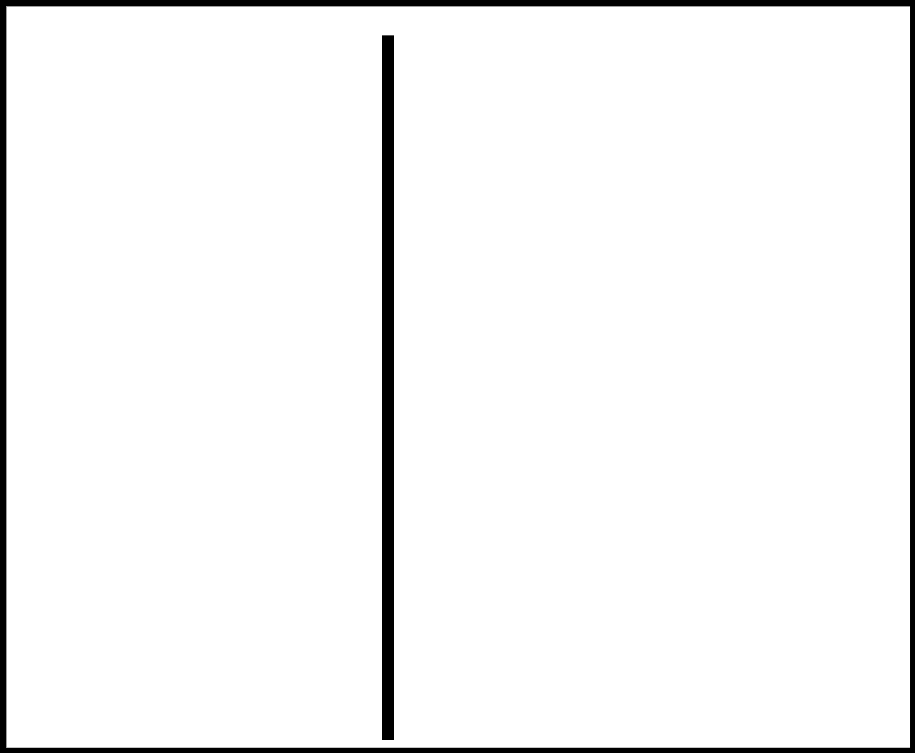
1. Select the value needed in the box in order for the expression to be a perfect square trinomial**.**
   1. 3.5
   2. 7
   3. 12.25
   4. 14.5

* (From Unit 6, Lesson 6.)

1. Rewrite each expression as the product of 2 factors.

* (From Unit 6, Lesson 5.)

1. Suppose this two-dimensional figure is rotated 360 degrees using the vertical axis shown. Each small square on the grid represents 1 square inch. What is the volume of the three-dimensional figure?

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* (From Unit 5, Lesson 15.)



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