### Lesson 1 Practice Problems

1. Sketch the solid of rotation formed by rotating the given two-dimensional figure using the horizontal line shown as an axis of rotation.
* 
1. Draw a two-dimensional figure that could be rotated using a vertical axis of rotation to give the barrel shown.
* 
1. Match the two-dimensional figure and axis of rotation with the solid of rotation that can be formed by rotating the figure using that axis.
	1. 
	2. 
	3. 
	4. a cylinder
	5. a sphere
	6. a cone
2. Find the area of the shaded region.
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* (From Unit 4, Lesson 11.)
1. *Technology required.*Find the area of the figure.
* 
* (From Unit 4, Lesson 11.)
1. *Technology required.*This stop sign is a regular octagon. It has side lengths of 12 inches. What is the area? What is the perimeter?
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* (From Unit 4, Lesson 10.)
1. Right triangle $ABC$ is shown.
* Select **all** expressions which are equal to the length of side $BC$.
* 
	1. $\sqrt{4.9^{2}+6^{2}}$
	2. $\sqrt{6^{2}−4.9^{2}}$
	3. $4.9sin\left(55\right)$
	4. $\frac{4.9}{sin\left(55\right)}$
	5. $4.9tan\left(55\right)$
	6. $\frac{4.9}{tan\left(55\right)}$
	7. $6cos\left(55\right)$
	8. $\frac{6}{cos\left(55\right)}$
* (From Unit 4, Lesson 6.)



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