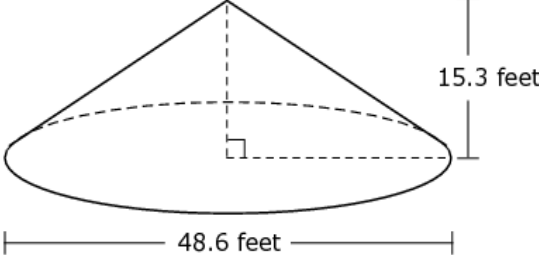


Geometry EOC Item Specifications
Florida Standards Assessments

MAFS.912.G-GMD.1.3	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
Item Types	<p>Equation Editor – May require expressing a numeric value or creating an expression.</p> <p>Multiple Choice – May require selecting from choices.</p> <p>Multiselect – May require identifying a value or a statement.</p> <p>Open Response – May require drawing a conclusion about a given situation.</p>
Clarification	Students will use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
Assessment Limits	<p>Items may require the student to recall the formula for the volume of a sphere.</p> <p>Items may require the student to find a dimension.</p> <p>Items that involve cones, cylinders, and spheres should require the student to do more than just find the volume.</p> <p>Items may include composite figures, including three-dimensional figures previously learned.</p> <p>Items may not include oblique figures.</p> <p>Items may require the student to find the volume when one or more dimensions are changed.</p> <p>Items may require the student to find a dimension when the volume is changed.</p>
Stimulus Attributes	<p>Items must be set in a real-world context.</p> <p>Items may require the student to apply the basic modeling cycle.</p>
Response Attributes	<p>Items may require the student to use or choose the correct unit of measure.</p> <p>Items may require the student to apply the basic modeling cycle.</p>
Calculator	Neutral

Sample Item	Item Type												
Equation Editor													
<p>As phosphate is mined, it moves along a conveyor belt, falling off of the end of the belt into the shape of a right circular cone, as shown.</p>													
 <p>The diagram shows a right circular cone. A vertical dashed line from the apex to the center of the base is labeled with a height of 15.3 feet. A horizontal dashed line from the center of the base to the edge is labeled with a diameter of 48.6 feet. A right-angle symbol is shown at the intersection of these two dashed lines.</p>													
<p>A shorter conveyor belt also has phosphate falling off of the end into the shape of a right circular cone. The height of the second pile of phosphate is 3.6 feet shorter than the height of the first. The volume of both piles is the same.</p>													
<p>To the nearest tenth of a foot, what is the diameter of the second pile of phosphate?</p>													
<input type="text"/>													
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