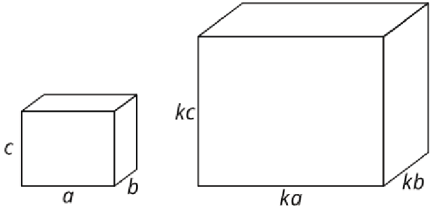
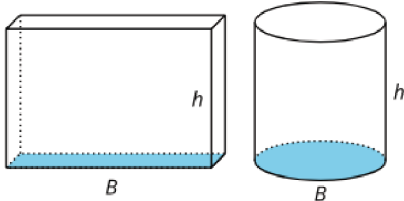
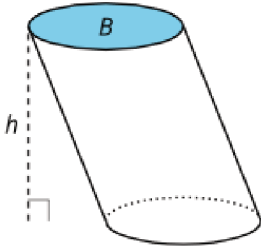
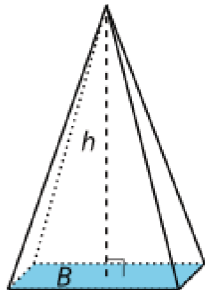
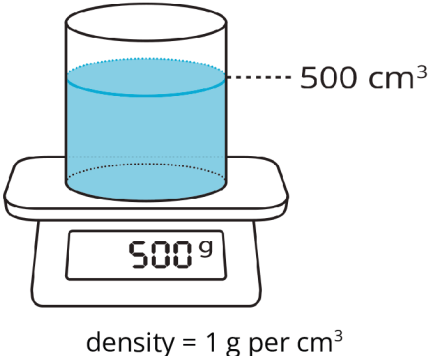
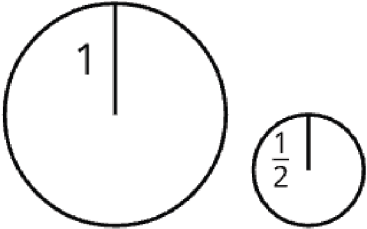
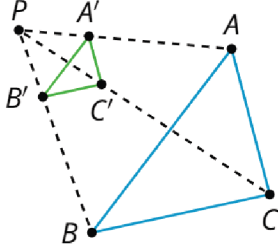
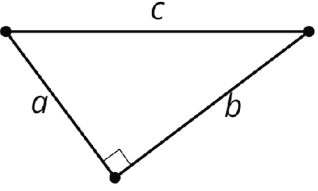
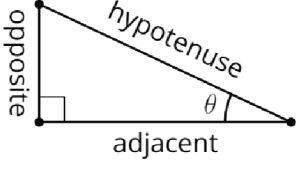
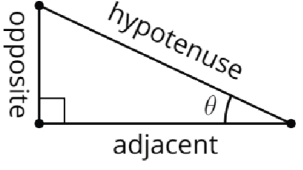
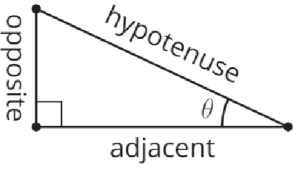
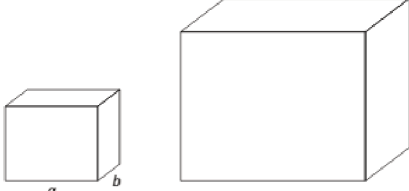
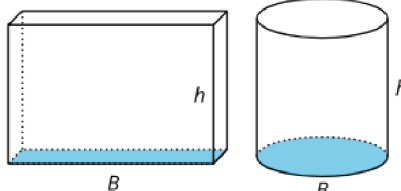
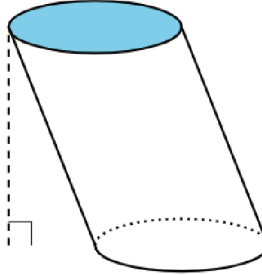
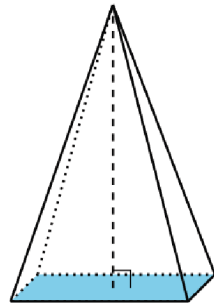
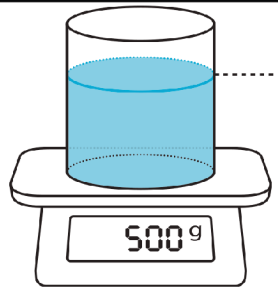


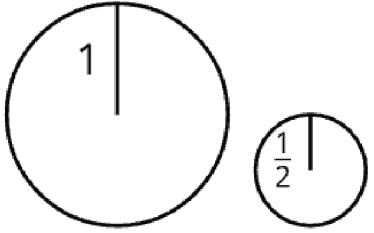
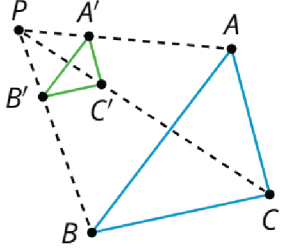
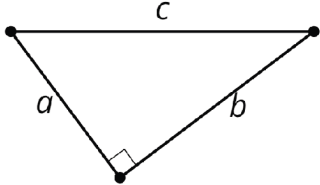
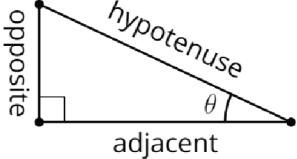
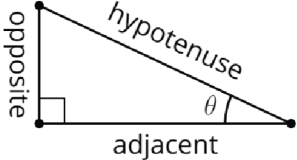
date, type	statement	diagram

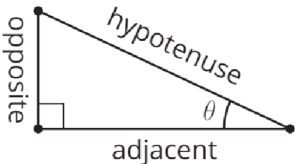
lesson, type	statement	diagram
U1, L7 theorem	When any solid is dilated using a scale factor of $k$ , all lengths are multiplied by $k$ , all areas are multiplied by $k^2$ , and all volumes are multiplied by $k^3$ .	
U1, L12 theorem	<b>Cavalieri's Principle:</b> If two solids are cut into cross sections by parallel planes, and the corresponding cross sections on each plane always have equal areas, then the two solids have the same volume.	
U1, L12 theorem	A prism or cylinder whose base has an area of $B$ square units and whose height is $h$ units has volume of $Bh$ cubic units, regardless of the shape of the base or whether the solid is oblique.	
U1, L15 theorem	A pyramid or cone whose base has an area of $B$ square units and whose height is $h$ units has volume $\frac{1}{3}Bh$ cubic units, regardless of the shape of the base or whether the solid is oblique.	
U1, L19 definition	The <b>density</b> of a substance is the mass of the substance per unit volume. That is, $\text{density} = \frac{\text{mass}}{\text{volume}}$ .	

type, number	statement	diagram
Definition 1	<b>Scale factor</b> is the factor by which every length in an original figure is multiplied when you make a scaled copy.	 <p>Scale factor is 2 or <math>\frac{1}{2}</math></p>
Definition 2	<p>A <b>dilation</b> with center <math>P</math> and positive scale factor <math>k</math> takes a point <math>A</math> along the ray <math>PA</math> to another point whose distance is <math>k</math> times farther away from <math>P</math> than <math>A</math> is.</p> <p>Dilate <u>(object)</u> using center <u>(point)</u> and a scale factor of <u>(number)</u>.</p>	 <p><math>PA' = k \cdot PA</math></p>
Theorem 3	<b>Pythagorean Theorem:</b> If a right triangle has legs with lengths $a$ and $b$ and hypotenuse with length $c$ , then $a^2 + b^2 = c^2$ .	 <p><math>a^2 + b^2 = c^2</math></p>
Definition 4	The <b>cosine</b> of an acute angle in a right triangle is the ratio (quotient) of the length of the adjacent leg to the length of the hypotenuse.	 <p><math>\cos(\theta) = \frac{\text{adjacent}}{\text{hypotenuse}}</math></p>
Definition 5	The <b>sine</b> of an acute angle in a right triangle is the ratio (quotient) of the length of the opposite leg to the length of the hypotenuse.	 <p><math>\sin(\theta) = \frac{\text{opposite}}{\text{hypotenuse}}</math></p>

type, number	statement	diagram
Definition 6	The <b>tangent</b> of an acute angle in a right triangle is the ratio (quotient) of the length of the opposite leg to the length of the adjacent leg.	 $\tan(\theta) = \frac{\text{opposite}}{\text{adjacent}}$

date, type	statement	diagram
theorem	When any solid is _____ using a _____ of $k$ , all lengths are multiplied by _____, all areas are multiplied by _____, and all volumes are multiplied by _____.	
theorem	<b>Cavalieri's Principle:</b> If two solids are cut into cross sections by _____ planes, and the corresponding _____ on each plane always have _____ areas, then the two solids have the same _____.	
theorem	A _____ or _____ whose base has an area of _____ square units and whose _____ is $h$ units has volume of _____ cubic units, regardless of the shape of the base or whether the solid is oblique.	
theorem	A _____ or _____ whose base has an area of _____ square units and whose _____ is $h$ units has volume _____ cubic units, regardless of the shape of the base or whether the solid is oblique.	
definition	The _____ of a substance is the _____ of the substance per unit _____.  That is, density = _____	 density = _____

type, number	statement	diagram
Definition 1	<b>Scale factor</b> is the factor by which every length in an original figure is multiplied when you make a scaled copy.	 <p>Scale factor is 2 or <math>\frac{1}{2}</math></p>
Definition 2	<p>A <b>dilation</b> with center <math>P</math> and positive scale factor <math>k</math> takes a point <math>A</math> along the ray <math>PA</math> to another point whose distance is <math>k</math> times farther away from <math>P</math> than <math>A</math> is.</p> <p>Dilate <u>(object)</u> using center <u>(point)</u> and a scale factor of <u>(number)</u>.</p>	 <p><math>PA' = k \cdot PA</math></p>
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type, number	statement	diagram
Definition 6	The <b>tangent</b> of an acute angle in a right triangle is the ratio (quotient) of the length of the opposite leg to the length of the adjacent leg.	 $\tan(\theta) = \frac{\text{opposite}}{\text{adjacent}}$