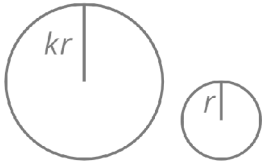
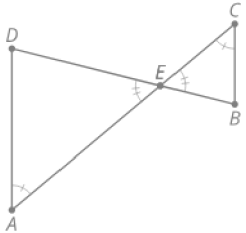
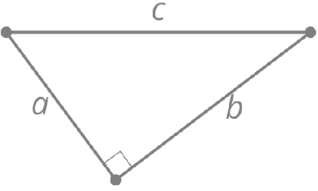
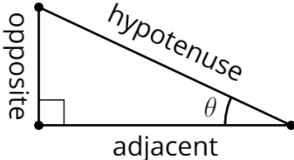
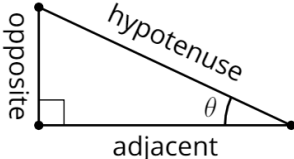
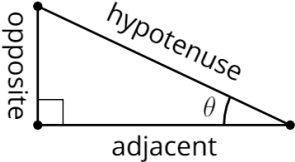
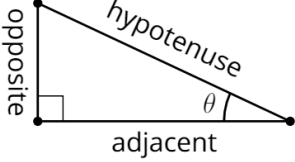
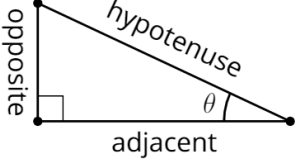
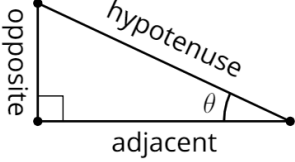


lesson, type	statement	diagram
U3, L8 theorem	All circles are similar.	
U3, L9 theorem	<b>Angle-Angle Triangle Similarity Theorem:</b> In two triangles, if two pairs of corresponding angles are congruent, then the triangles must be similar.	 <p><math>\angle A \cong \angle C, \angle DEA \cong \angle BEC,</math> so <math>\triangle DEA \sim \triangle BEC</math></p>
U3, L14 theorem	<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>
U4, L6 definition	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>
U4, L6 definition	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>

lesson, type	statement	diagram
U4, L6 definition	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.	 $\tan(\theta) = \frac{\text{opposite}}{\text{adjacent}}$
U4, L9 definition	The <b>arccosine</b> of a number between 0 and 1 is the acute angle whose cosine is that number.	 $\arccos\left(\frac{\text{adjacent}}{\text{hypotenuse}}\right) = \theta$
U4, L9 definition	The <b>arcsine</b> of a number between 0 and 1 is the acute angle whose sine is that number.	 $\arcsin\left(\frac{\text{opposite}}{\text{hypotenuse}}\right) = \theta$
U4, L9 definition	The <b>arctangent</b> of a positive number is the acute angle whose tangent is that number.	 $\arctan\left(\frac{\text{opposite}}{\text{adjacent}}\right) = \theta$
U5, L6 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 $k^3$ .	