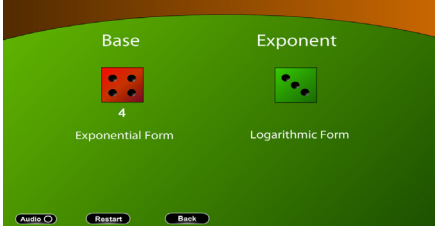
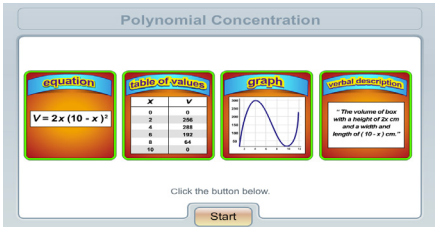
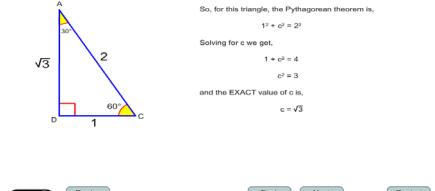
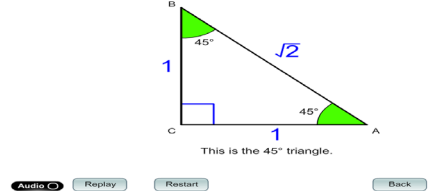


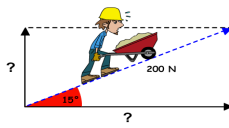

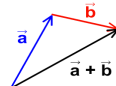
MCT4C

Ontario Educational Resources Bank (OERB) Activities

Exponential Functions	
Activity	Description
<p>Log Rolling (Can be Dicey)</p>  <p>Resource ID: ELO1178270</p>	<p>Practise converting between logarithmic and exponential forms and evaluating logarithms by answering questions in a challenge activity.</p>
Polynomial Functions	
Activity	Description
<p>Polynomial Concentration</p>  <p>Resource ID: ELO1178280</p>	<p>Build understanding of characteristics of polynomial functions by matching different representations of a variety of polynomial functions.</p>
Trigonometric Functions	
Activity	Description
<p>Constructing the 30°, 60° Triangle</p>  <p>Resource ID: ELO1178300</p>	<p>Build understanding of how the measures in a 30°, 60° triangle are related by viewing how it can be constructed from an equilateral triangle.</p>
<p>Constructing the 45° Triangle</p>  <p>Resource ID: ELO1178310</p>	<p>Build understanding of how the measures in an isosceles right triangle are related by viewing how it can be constructed from a unit square.</p>

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Ontario Educational Resources Bank (OERB) Activities

Applications of Geometry	
Activity	Description
<p>Adding Victor's Vectors</p> <p>Sometimes we may want to determine the component vectors. That is, determine what vectors were added together to arrive at the resultant vector.</p> <p>Example: Victor must push a wheelbarrow up a ramp that is at an angle of 15° above horizontal. If it takes a force of 200 N to push the loaded wheelbarrow up the ramp what are the vertical and horizontal components of this force?</p> <p>In other words, what is the upward force and what is the horizontal force.</p>  <p>The diagram shows a wheelbarrow on a ramp inclined at 15° to the horizontal. A force vector of 200 N is applied parallel to the ramp. A dashed rectangle is drawn with the force vector as the hypotenuse. The vertical side is labeled with a question mark, and the horizontal side is also labeled with a question mark. A small icon of a person pushing the wheelbarrow is shown on the ramp.</p> <p>Audio  Restart Back Next</p> <p>Resource ID: ELO1178320</p>	<p>Build understanding of vector addition by viewing an interactive tutorial showing a number of worked examples of real life applications. Practise applying this knowledge by solving similar vector addition problems.</p>
<p>Vector Addition Adding Vectors</p>  <p>The diagram shows two vectors, \vec{a} (blue) and \vec{b} (red), originating from the same point. A third vector, $\vec{a} + \vec{b}$ (black), is drawn from the tail of \vec{a} to the tip of \vec{b}, representing the geometric sum.</p> <p>If we wanted to find the sum of the two vectors here, $\vec{a} + \vec{b}$, geometrically, what we do is slide vector \vec{b} over so that its tail is at the tip of vector \vec{a}. The geometric sum of the two vectors, here shown in black, goes from the tail of vector \vec{a} directly to the tip of vector \vec{b}.</p> <p>Previous Restart Continue</p> <p>Resource ID: ELO1197530</p>	<p>Practise adding two vectors by dragging given vectors into position to show the component vectors and the resultant vector properly aligned.</p>