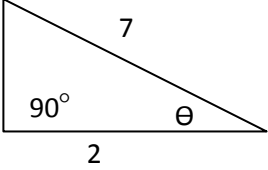
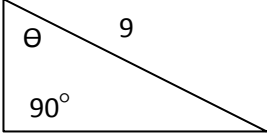
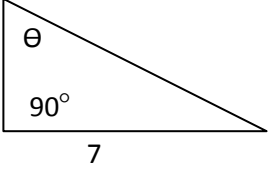
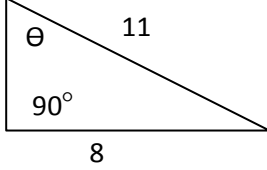
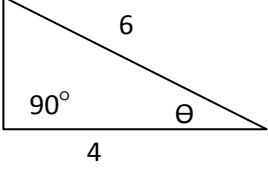
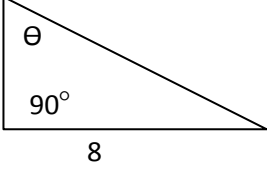
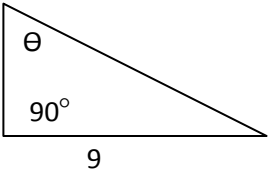
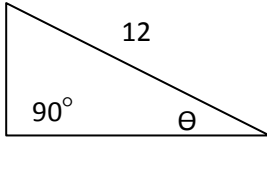
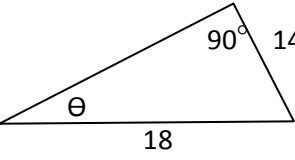
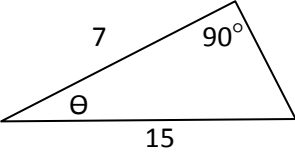
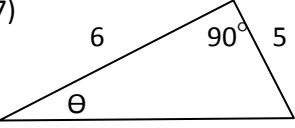
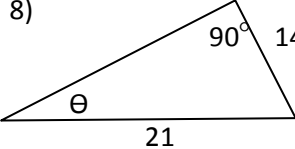
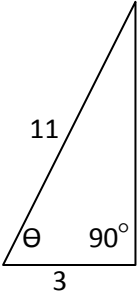
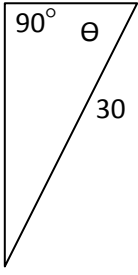
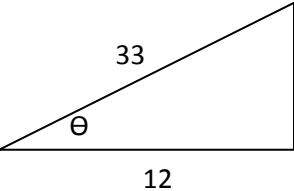
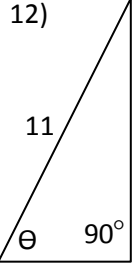
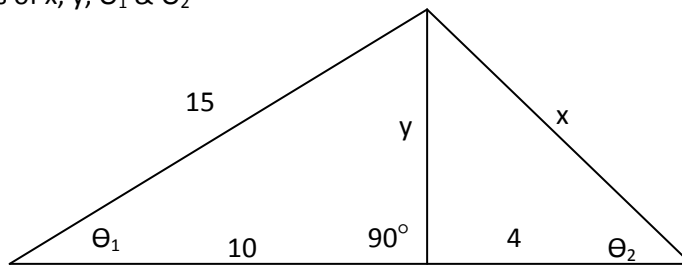


Topic 27: Using Trigonometry To Solve For Angles

<p>1)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 7, and the side adjacent to angle <math>\theta</math> at the bottom right is 2.</p>	<p>2)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 9, and the side opposite to angle <math>\theta</math> at the top left is 5.</p>
<p>3)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 7, and the side opposite to angle <math>\theta</math> at the top left is 5.</p>	<p>4)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 11, and the side adjacent to angle <math>\theta</math> at the top left is 8.</p>
<p>5)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 6, and the side adjacent to angle <math>\theta</math> at the bottom right is 4.</p>	<p>2)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 8, and the side opposite to angle <math>\theta</math> at the top left is 5.</p>
<p>3)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 9, and the side opposite to angle <math>\theta</math> at the top left is 5.</p>	<p>4)</p>  <p>A right-angled triangle with a right angle at the bottom left. The hypotenuse is 12, and the side opposite to angle <math>\theta</math> at the bottom right is 6.</p>
<p>5)</p>  <p>A right-angled triangle with a right angle at the top vertex. The hypotenuse is 18, and the side opposite to angle <math>\theta</math> at the bottom left is 14.</p>	<p>6)</p>  <p>A right-angled triangle with a right angle at the top vertex. The hypotenuse is 15, and the side opposite to angle <math>\theta</math> at the bottom left is 7.</p>
<p>7)</p>  <p>A right-angled triangle with a right angle at the top vertex. The hypotenuse is 21, and the side opposite to angle <math>\theta</math> at the bottom left is 5.</p>	<p>8)</p>  <p>A right-angled triangle with a right angle at the top vertex. The hypotenuse is 14, and the side opposite to angle <math>\theta</math> at the bottom left is 5.</p>

<p>9)</p> 	<p>10)</p> 
<p>11)</p> 	<p>12)</p> 

13) Find the values of  $x$ ,  $y$ ,  $\theta_1$  &  $\theta_2$



14) A stair case will be built to rise 9 feet above the first floor to the second floor. It will fit in the 1<sup>st</sup> floor space of 12 feet. What is the angle of inclination and declination?

