

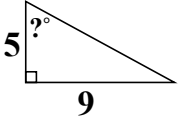
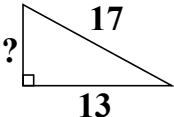
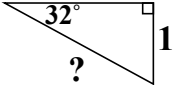
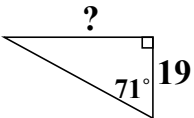
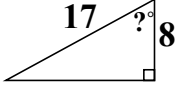
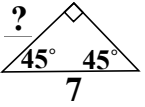
When to Use Trigonometry

If you have two parts of a right triangle (not including the right angle), then you can find any other part of the triangle.

If you <b>have</b> ...	<b>2 sides</b>	<b>One side &amp; 30-60-90 or 45-45-90</b>	<b>Two sides</b>	<b>One side and one angle</b>														
And you <b>want</b> ...	<b>A side</b>	<b>A side</b>	<b>An angle</b>	<b>A side</b>														
Then you can <b>use</b> ...	<b>Pythagorean Theorem</b>	<b>Special Triangles</b>	<b>Trigonometry</b>	<b>Trigonometry</b>														
Which <b>looks like</b> ...	$a^2 + b^2 = c^2$	<table border="1"> <thead> <tr> <th>Angle Equals</th> <th>Opposite equals</th> </tr> </thead> <tbody> <tr> <td>30°</td> <td><math>x</math></td> </tr> <tr> <td>60°</td> <td><math>x\sqrt{3}</math></td> </tr> <tr> <td>90°</td> <td><math>2x</math></td> </tr> <tr> <td>45°</td> <td><math>x</math></td> </tr> <tr> <td>45°</td> <td><math>x</math></td> </tr> <tr> <td>90°</td> <td><math>x\sqrt{2}</math></td> </tr> </tbody> </table>	Angle Equals	Opposite equals	30°	$x$	60°	$x\sqrt{3}$	90°	$2x$	45°	$x$	45°	$x$	90°	$x\sqrt{2}$	<p><b>SOH</b>  <math>\sin(\text{ANGLE}) = \frac{\text{opp}}{\text{hyp}}</math></p> <p><b>CAH</b>  <math>\cos(\text{ANGLE}) = \frac{\text{adj}}{\text{hyp}}</math></p> <p><b>TOA</b>  <math>\tan(\text{ANGLE}) = \frac{\text{opp}}{\text{adj}}</math></p>	<p><b>SOH</b>  <math>\sin(\text{ANGLE}) = \frac{\text{opp}}{\text{hyp}}</math></p> <p><b>CAH</b>  <math>\cos(\text{ANGLE}) = \frac{\text{adj}}{\text{hyp}}</math></p> <p><b>TOA</b>  <math>\tan(\text{ANGLE}) = \frac{\text{opp}}{\text{adj}}</math></p>
Angle Equals	Opposite equals																	
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90°	$x\sqrt{2}$																	

For each right triangle given below, fill in the requested information *just like it was written in the table above*.  
**DO NOT SOLVE!**

	1.	2.	3.
<b>I HAVE...</b>			
<b>I WANT...</b>			
<b>I'LL USE...</b>			
<b>IT LOOKS LIKE...</b>			

	4. 	5. 	6. 
<b>I HAVE...</b>			
<b>I WANT...</b>			
<b>I'LL USE...</b>			
<b>IT LOOKS LIKE...</b>			
	7. 	8. 	9. 
<b>I HAVE...</b>			
<b>I WANT...</b>			
<b>I'LL USE...</b>			
<b>IT LOOKS LIKE...</b>			