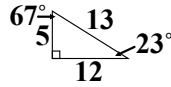


Plugging in Trig Values

Before you can solve a trig problem, you have to know how to write one. For now, the problems have nothing to solve and no missing pieces. For each of the two *non-right* angles identify the parts (angle, hypotenuse, opposite, and adjacent), and plug that information into each of the three trig ratios (sine, cosine, and tangent).

EXAMPLE

Write the three trig ratios for each angle.



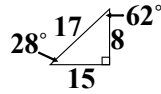
SOH **CAH** **TOA**
 $\sin(\text{angle}) = \frac{\text{opp}}{\text{hyp}}$ $\cos(\text{angle}) = \frac{\text{adj}}{\text{hyp}}$ $\tan(\text{angle}) = \frac{\text{opp}}{\text{adj}}$

<i>First, to write the fractions for ANGLE 1...</i>	<i>Then, to write the fractions for ANGLE 2...</i>
<ol style="list-style-type: none"> 1. Label the hypotenuse 2. Label the opposite of one angle 3. Label the adjacent side 4. Plug that information into sine, cosine, and tangent 	<ol style="list-style-type: none"> 1. Label the hypotenuse 2. Label the opposite of the other angle 3. Label the adjacent side 4. Plug that information into sine, cosine, and tangent
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> $\sin(\text{angle}) = \frac{\text{opp}}{\text{hyp}}$ $\sin(67) = \frac{5}{13}$ </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\cos(\text{angle}) = \frac{\text{adj}}{\text{hyp}}$ $\cos(67) = \frac{12}{13}$ </div> <div style="text-align: center;"> $\tan(\text{angle}) = \frac{\text{opp}}{\text{adj}}$ $\tan(67) = \frac{5}{12}$ </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> $\sin(\text{angle}) = \frac{\text{opp}}{\text{hyp}}$ $\sin(23) = \frac{12}{13}$ </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\cos(\text{angle}) = \frac{\text{adj}}{\text{hyp}}$ $\cos(23) = \frac{5}{13}$ </div> <div style="text-align: center;"> $\tan(\text{angle}) = \frac{\text{opp}}{\text{adj}}$ $\tan(23) = \frac{12}{5}$ </div> </div>

Write the three trig ratios for each angle.

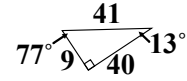
<p>1.</p> <div style="text-align: center; margin-bottom: 10px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 50%; text-align: center;">ANGLE 1</th> <th style="width: 50%; text-align: center;">ANGLE 2</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">$\sin(\quad) = \text{---}$</td> <td style="text-align: center;">$\sin(\quad) = \text{---}$</td> </tr> <tr> <td style="text-align: center;">$\cos(\quad) = \text{---}$</td> <td style="text-align: center;">$\cos(\quad) = \text{---}$</td> </tr> <tr> <td style="text-align: center;">$\tan(\quad) = \text{---}$</td> <td style="text-align: center;">$\tan(\quad) = \text{---}$</td> </tr> </tbody> </table>	ANGLE 1	ANGLE 2	$\sin(\quad) = \text{---}$	$\sin(\quad) = \text{---}$	$\cos(\quad) = \text{---}$	$\cos(\quad) = \text{---}$	$\tan(\quad) = \text{---}$	$\tan(\quad) = \text{---}$	<p>2.</p> <div style="text-align: center; margin-bottom: 10px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 50%; text-align: center;">ANGLE 1</th> <th style="width: 50%; text-align: center;">ANGLE 2</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">$\sin(\quad) = \text{---}$</td> <td style="text-align: center;">$\sin(\quad) = \text{---}$</td> </tr> <tr> <td style="text-align: center;">$\cos(\quad) = \text{---}$</td> <td style="text-align: center;">$\cos(\quad) = \text{---}$</td> </tr> <tr> <td style="text-align: center;">$\tan(\quad) = \text{---}$</td> <td style="text-align: center;">$\tan(\quad) = \text{---}$</td> </tr> </tbody> </table>	ANGLE 1	ANGLE 2	$\sin(\quad) = \text{---}$	$\sin(\quad) = \text{---}$	$\cos(\quad) = \text{---}$	$\cos(\quad) = \text{---}$	$\tan(\quad) = \text{---}$	$\tan(\quad) = \text{---}$
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$\tan(\quad) = \text{---}$	$\tan(\quad) = \text{---}$																

3.



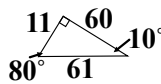
ANGLE 1	ANGLE 2
$\sin(\quad) = \text{---}$	$\sin(\quad) = \text{---}$
$\cos(\quad) = \text{---}$	$\cos(\quad) = \text{---}$
$\tan(\quad) = \text{---}$	$\tan(\quad) = \text{---}$

4.



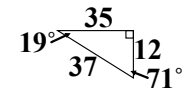
ANGLE 1	ANGLE 2
$\sin(\quad) = \text{---}$	$\sin(\quad) = \text{---}$
$\cos(\quad) = \text{---}$	$\cos(\quad) = \text{---}$
$\tan(\quad) = \text{---}$	$\tan(\quad) = \text{---}$

5.



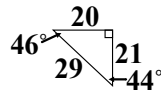
ANGLE 1	ANGLE 2

6.



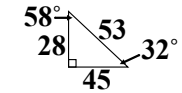
ANGLE 1	ANGLE 2

7.



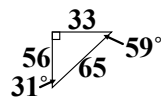
ANGLE 1	ANGLE 2

8.



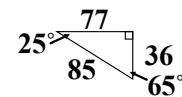
ANGLE 1	ANGLE 2

9.



ANGLE 1	ANGLE 2

10.



ANGLE 1	ANGLE 2