

A portion of a trig table is shown. Use it to find the angle that makes each equation true.

$\sin(A) = 0.8572$ $A = \text{_____}^\circ$	$\cos(D) = 0.6018$	$\tan(G) = 1.0355$
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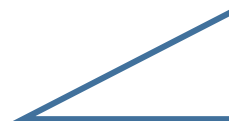
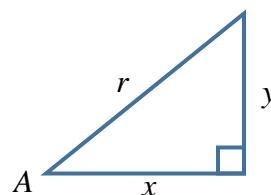
A	SIN(A)	COS(A)	Tan(A)
45	0.7071	0.7071	1.0000
46	0.7193	0.6947	1.0355
53	0.7986	0.6018	1.3270
54	0.8090	0.5878	1.3764
59	0.8572	0.5150	1.6643
60	0.8660	0.5000	1.7321

\*To use your calculator press: 2nd SIN<sup>-1</sup> (0.8572) ENTER =

## Core Concept

### Inverse Trigonometric Ratios

Inverse Sine	Inverse Cosine	Inverse Tangent
$\sin(A) = \frac{y}{r}$	$\cos(A) = \frac{x}{r}$	$\tan(A) = \frac{y}{x}$
$A = \sin^{-1}\left(\frac{y}{r}\right)$	$A =$	$A =$



Use your calculator:  $\sin(30^\circ) = \text{_____}$  and the  $\sin^{-1}\left(\frac{1}{2}\right) = \text{_____}^\circ$

Examples: Round angles to the nearest tenth and sides to the nearest hundredth.

<p>1) Find <math>m\angle F</math>.</p> <p><math>\cos(F) = \text{_____}</math></p> <p><math>F = \cos^{-1}\left(\text{_____}\right)</math></p> <p><math>F = \text{_____}^\circ</math></p>	<p>2) Find <math>m\angle G</math>.</p>	<p>3) Find <math>m\angle B</math>.</p>
<p>4) <b>Solve the triangle:</b> (which means find all the missing _____ lengths and _____ measures.)</p> <div style="text-align: right; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">             Round angles to nearest tenth and sides to nearest hundredth.         </div> <div style="text-align: right; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">             *This #14 on HW so you can skip that problem.         </div>		