



Trig Twisters

10/10

Name: _____
Date: _____

Directions: You and your partner will work together to solve these trigonometry-related problems. You solve the problems on the left and your partner will solve the problems on the right. When you are done, your answers will match – but the answers are NOT in the same order as the problems. Use your calculator and round answers to the nearest tenth unless stated otherwise.

Find $\sin A$ in $\triangle ABC$.

Handwritten solution: $\sin A = \frac{16}{20} = \frac{4}{5}$

What is the product of $\cos 45^\circ$ and $\sin 45^\circ$?

Handwritten solution: $\cos 45^\circ = \frac{\sqrt{2}}{2}$, $\sin 45^\circ = \frac{\sqrt{2}}{2}$, product = $\frac{\sqrt{2}}{2} \cdot \frac{\sqrt{2}}{2} = \frac{2}{4} = \frac{1}{2}$

In right triangle ABC , with right angle at B , the side $AC = 10$. Find A to the nearest degree.

Handwritten solution: $\sin A = \frac{6}{10} = 0.6$, $A \approx 37^\circ$

Find $\sin A$ in $\triangle ABC$.

Handwritten solution: $\sin A = \frac{1}{2}$

What is the product of $\tan 45^\circ$ and $\cot 45^\circ$?

Handwritten solution: $\tan 45^\circ = 1$, $\cot 45^\circ = 1$, product = $1 \cdot 1 = 1$

Express $\sin A$ as a fraction.

Handwritten solution: $\sin A = \frac{24}{25}$

Express $\cos B$ as a fraction.

Handwritten solution: $\cos B = \frac{4}{5}$

In right triangle ABC , with right angle at B , the side $BC = 8$. Find B to the nearest degree.

Handwritten solution: $\sin B = \frac{8}{10} = 0.8$, $B \approx 53^\circ$