

DIRECTIONS: Find the sine (sin), cosine (cos), and tangent (tan) ratios for the following triangles. Write them **two** ways – 1) as reduced fractions (improper, if necessary), and 2) as decimals rounded to four places.

$$1. \sin P = \frac{5}{13} \text{ or } 0.3846$$

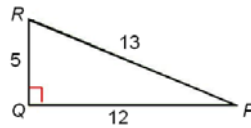
$$\sin R = \frac{12}{13} \text{ or } 0.9231$$

$$\cos P = \frac{12}{13} \text{ or } 0.9231$$

$$\cos R = \frac{5}{13} \text{ or } 0.3846$$

$$\tan P = \frac{5}{12} \text{ or } 0.4167$$

$$\tan R = \frac{12}{5} \text{ or } 2.4$$



$$2. \sin D = \frac{3}{5} \text{ or } 0.6$$

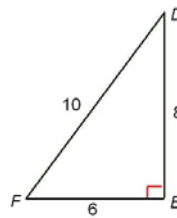
$$\sin F = \frac{4}{5} \text{ or } 0.8$$

$$\cos D = \frac{4}{5} \text{ or } 0.8$$

$$\cos F = \frac{3}{5} \text{ or } 0.6$$

$$\tan D = \frac{3}{4} \text{ or } 0.75$$

$$\tan F = \frac{4}{3} \text{ or } 1.3333$$



$$3. \sin N = \frac{15}{17} \text{ or } 0.8824$$

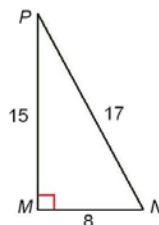
$$\sin P = \frac{8}{17} \text{ or } 0.4706$$

$$\cos N = \frac{8}{17} \text{ or } 0.4706$$

$$\cos P = \frac{15}{17} \text{ or } 0.8824$$

$$\tan N = \frac{15}{8} \text{ or } 1.875$$

$$\tan P = \frac{8}{15} \text{ or } 0.5333$$



4. $\sin X = \frac{7}{25}$ or **0.28**

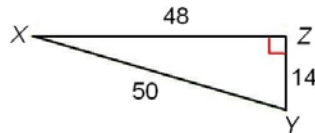
$\sin Y = \frac{24}{25}$ or **0.96**

$\cos X = \frac{24}{25}$ or **0.96**

$\cos Y = \frac{7}{25}$ or **0.28**

$\tan X = \frac{7}{24}$ or **0.2917**

$\tan Y = \frac{24}{7}$ or **3.4286**



5. $\sin A = \frac{\sqrt{2}}{2}$ or **0.7071**

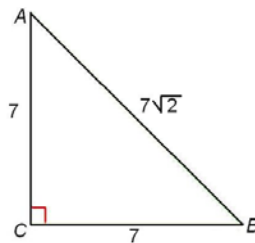
$\sin B = \frac{\sqrt{2}}{2}$ or **0.7071**

$\cos A = \frac{\sqrt{2}}{2}$ or **0.7071**

$\cos B = \frac{\sqrt{2}}{2}$ or **0.7071**

$\tan A = 1$ or **1.0**

$\tan B = 1$ or **1.0**



6. $\sin A = \frac{\sqrt{3}}{2}$ or **0.8660**

$\sin C = \frac{1}{2}$ or **0.5**

$\cos A = \frac{1}{2}$ or **0.5**

$\cos C = \frac{\sqrt{3}}{2}$ or **0.8660**

$\tan A = \sqrt{3}$ or **1.7321**

$\tan C = \frac{\sqrt{3}}{3}$ or **0.5774**

