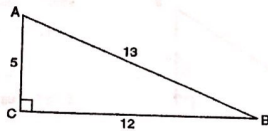


Key

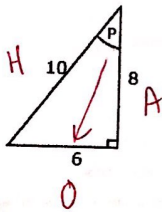
Part III. Writing Sine, Cosine, Tangent Ratios

1) Which ratio represents  $\cos A$  in the accompanying diagram of  $\triangle ABC$ ?



- (1)  $\frac{5}{13}$
- (2)  $\frac{12}{13}$
- (3)  $\frac{5}{12}$
- (4)  $\frac{13}{5}$

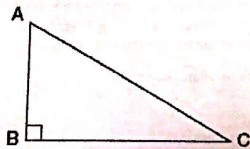
2) Which ratio represents  $\sin P$  in the accompanying triangle?



$\sin = \frac{O}{H}$   
 $\frac{3}{5}$

- (1)  $\frac{6}{10}$
- (2)  $\frac{8}{10}$
- (3)  $\frac{6}{8}$
- (4)  $\frac{10}{6}$

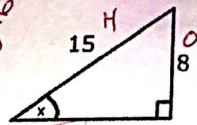
3) In the accompanying diagram of right triangle ABC,  $AB = 8$ ,  $BC = 15$ ,  $AC = 17$ , and  $m\angle ABC = 90$ .



What is  $\tan \angle C$ ?

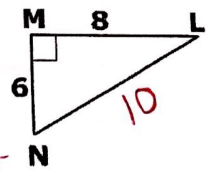
- (1)  $\frac{8}{15}$
- (2)  $\frac{17}{15}$
- (3)  $\frac{8}{17}$
- (4)  $\frac{15}{17}$

4) What is  $\cos(x)$ ?  $= \frac{A}{H} = \frac{12.6}{15}$



Find using Pyth. theorem

5) What is  $\sin(L)$ ,  $\cos(L)$  and  $\tan(L)$ ?

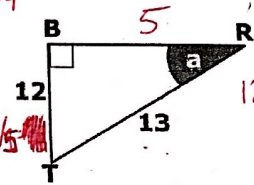


$\sin = \frac{6}{10} = \frac{3}{5}$

$\cos = \frac{8}{10} = \frac{4}{5}$

$\tan = \frac{6}{8} = \frac{3}{4}$

6) What is  $\sin(a)$ ,  $\cos(a)$  and  $\tan(a)$ ?



$\sin = \frac{12}{13}$

$\cos = \frac{5}{13}$

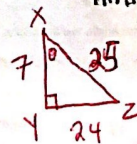
$\tan = \frac{12}{5}$

$12^2 + b^2 = 13^2$   
 $b = 5$

7) In triangle XYZ,  $\angle y = 90^\circ$ ,  $XY = 7$ ,  $YZ = 24$ , and  $XZ = 25$ , which ratio represents cosine of  $\angle X$ ?

- (1)  $\frac{7}{24}$
- (2)  $\frac{24}{25}$
- (3)  $\frac{7}{25}$
- (4)  $\frac{24}{7}$

Hint: draw a picture



$\cos = \frac{A}{H} = \frac{7}{25}$

8) In triangle MCT, the measure of  $\angle T = 90^\circ$ ,  $MC = 85$  cm,  $CT = 84$  cm, and  $TM = 13$  cm. Which ratio represents the sine of  $\angle C$ ?

- (1)  $\frac{13}{85}$
- (2)  $\frac{84}{85}$
- (3)  $\frac{13}{84}$
- (4)  $\frac{84}{13}$

