

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

Name Key

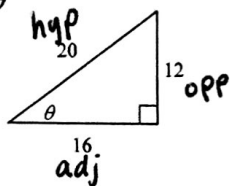
Date \_\_\_\_\_ Period \_\_\_\_\_

### Checkpoint 7B

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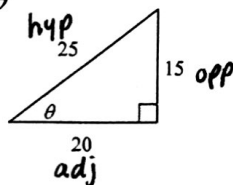
Find the value of the trig function indicated.

1)  $\sin \theta$



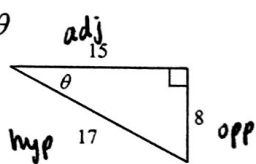
$$\sin \theta = \frac{12}{20} = \boxed{\frac{3}{5}}$$

2)  $\cos \theta$



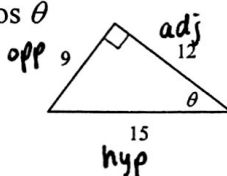
$$\cos \theta = \frac{20}{25} = \boxed{\frac{4}{5}}$$

3)  $\tan \theta$



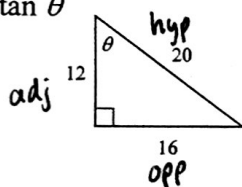
$$\tan \theta = \frac{8}{15} = \boxed{\frac{8}{15}}$$

4)  $\cos \theta$



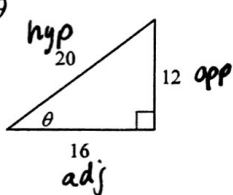
$$\cos \theta = \frac{12}{15} = \boxed{\frac{4}{5}}$$

5)  $\tan \theta$



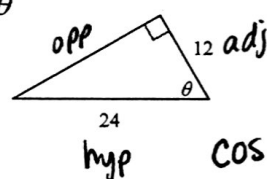
$$\tan \theta = \frac{16}{12} = \boxed{\frac{4}{3}}$$

6)  $\cos \theta$



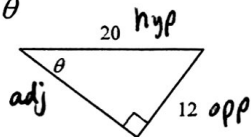
$$\cos \theta = \frac{16}{20} = \boxed{\frac{4}{5}}$$

7)  $\cos \theta$



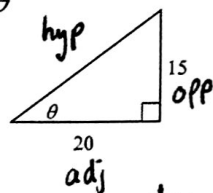
$$\cos \theta = \frac{12}{24} = \boxed{\frac{1}{2}}$$

8)  $\sin \theta$



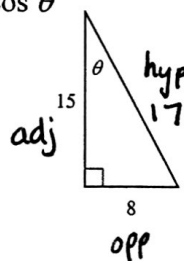
$$\sin \theta = \frac{12}{20} = \boxed{\frac{3}{5}}$$

9)  $\tan \theta$



$$\tan \theta = \frac{12}{16} = \boxed{\frac{3}{4}}$$

10)  $\cos \theta$

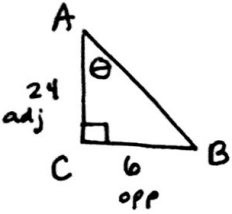


$$\begin{aligned} (15)^2 + (8)^2 &= x^2 \\ 225 + 64 &= x^2 \\ \sqrt{289} &= \sqrt{x^2} \\ 17 &= x \end{aligned}$$

$$\cos \theta = \frac{8}{17} = \boxed{\frac{8}{17}}$$

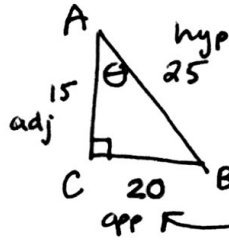
In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.

11) Find  $\tan A$  if  $b = 24$ ,  $a = 6$



$$\tan(A) = \frac{6}{24} = \boxed{\frac{1}{4}}$$

12) Find  $\sin A$  if  $b = 15$ ,  $c = 25$



$$\begin{aligned} x^2 + 15^2 &= 25^2 \\ x^2 + 225 &= 625 \\ -225 \quad -225 & \\ \hline \sqrt{x^2} &= \sqrt{400} \end{aligned}$$

$$x = 20$$

$$\sin(A) = \frac{20}{25} = \boxed{\frac{4}{5}}$$

Find the value of the trig function indicated.

13) Find  $\sin \theta$  if  $\cos \theta = \frac{4}{5}$



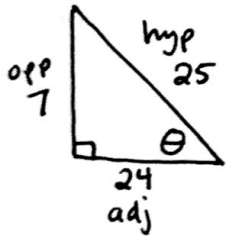
$$\sin \theta = \frac{3}{5}$$

14) Find  $\cos \theta$  if  $\sin \theta = \frac{5}{13}$



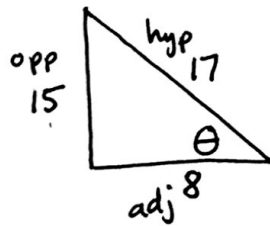
$$\cos \theta = \frac{12}{13}$$

15) Find  $\sin \theta$  if  $\cos \theta = \frac{24}{25}$



$$\sin \theta = \frac{7}{25}$$

16) Find  $\tan \theta$  if  $\sin \theta = \frac{15}{17}$



$$\tan \theta = \frac{15}{8}$$