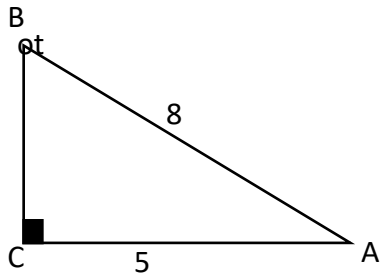


Name \_\_\_\_\_ Group \_\_\_\_\_

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### Trigonometry Basics

1. Find all 6 trig ratios for angle A in the triangle below.



2. Solve for  $x$  in each of the following:

a.  $\sin 53^\circ = x$

b.  $\sec 86^\circ = x$

c.  $\csc 12^\circ = x$

d.  $\cot 41^\circ = x$

e.  $\csc x = 1.01$

f.  $\sec x = 4$

g.  $\cot x = 2$

h.  $\frac{\sin x}{\cos x} = 1.3$

3. Given  $\sin x = \frac{4}{7}$  determine the exact value of  $\cot x$ .

4. Given  $\sec x = \frac{12}{5}$  determine the exact value of  $\sin x$ .

5. Given  $P(\theta) = (2, 7)$ , determine the exact value of all 6 trig ratios.

6. Given  $P(\theta) = (-4, -5)$ , determine the exact value of all 6 trig ratios.

7. Given  $\cos \theta = -\frac{4}{7}$  and  $\sin \theta > 0$ , determine the exact value of  $\tan \theta$ .

8. Given  $\sin \theta = \frac{2}{5}$  and  $\tan \theta > 0$ , determine the exact value of  $\cos \theta$ .

9. Given  $\sin \theta = 0.4$ , determine the possible values of  $\theta$  for  $0^\circ \leq \theta \leq 360^\circ$

10. Given  $\tan \theta = -0.9$ , determine the possible values of  $\theta$  for  $360^\circ \leq \theta \leq 720^\circ$