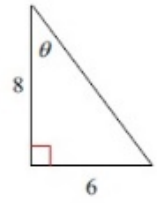
Using a Triangle to Find the 6 Trig Functions Practice Problems

Use the triangle to find the exact values of the six trig functions of θ.

1)



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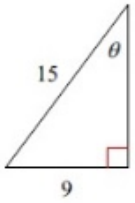

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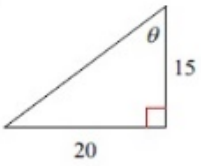

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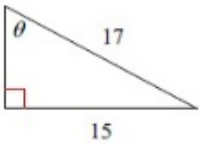

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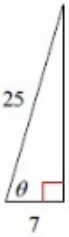

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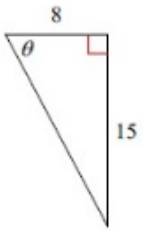

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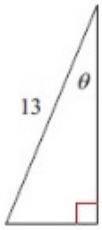
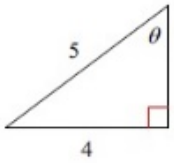
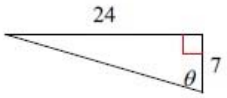


8)



9)



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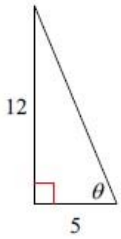

Using a Triangle to Find the 6 Trig Functions
Practice Problems Answers

1) $\sin(\theta) = \frac{3}{5}$ $\csc(\theta) = \frac{5}{3}$

$\cos(\theta) = \frac{4}{5}$ $\sec(\theta) = \frac{5}{4}$

$\tan(\theta) = \frac{3}{4}$ $\cot(\theta) = \frac{4}{3}$

2) $\sin(\theta) = \frac{3}{5}$ $\csc(\theta) = \frac{5}{3}$

$\cos(\theta) = \frac{4}{5}$ $\sec(\theta) = \frac{5}{4}$

$\tan(\theta) = \frac{3}{4}$ $\cot(\theta) = \frac{4}{3}$

3) $\sin(\theta) = \frac{4}{5}$ $\csc(\theta) = \frac{5}{4}$

$\cos(\theta) = \frac{3}{5}$ $\sec(\theta) = \frac{5}{3}$

$\tan(\theta) = \frac{4}{3}$ $\cot(\theta) = \frac{3}{4}$

4) $\sin(\theta) = \frac{15}{17}$ $\csc(\theta) = \frac{17}{15}$

$\cos(\theta) = \frac{8}{17}$ $\sec(\theta) = \frac{17}{8}$

$\tan(\theta) = \frac{15}{8}$ $\cot(\theta) = \frac{8}{15}$

5) $\sin(\theta) = \frac{24}{25}$ $\csc(\theta) = \frac{25}{24}$

$\cos(\theta) = \frac{7}{25}$ $\sec(\theta) = \frac{25}{7}$

$\tan(\theta) = \frac{24}{7}$ $\cot(\theta) = \frac{7}{24}$

6) $\sin(\theta) = \frac{15}{17}$ $\csc(\theta) = \frac{17}{15}$

$\cos(\theta) = \frac{8}{17}$ $\sec(\theta) = \frac{17}{8}$

$\tan(\theta) = \frac{15}{8}$ $\cot(\theta) = \frac{8}{15}$

7) $\sin(\theta) = \frac{\sqrt{48}}{13}$ $\csc(\theta) = \frac{13\sqrt{48}}{48}$

$\cos(\theta) = \frac{11}{13}$ $\sec(\theta) = \frac{13}{11}$

$\tan(\theta) = \frac{\sqrt{48}}{11}$ $\cot(\theta) = \frac{11\sqrt{48}}{48}$

8) $\sin(\theta) = \frac{4}{5}$ $\csc(\theta) = \frac{5}{4}$

$\cos(\theta) = \frac{3}{5}$ $\sec(\theta) = \frac{5}{3}$

$\tan(\theta) = \frac{4}{3}$ $\cot(\theta) = \frac{3}{4}$

9) $\sin(\theta) = \frac{24}{25}$ $\csc(\theta) = \frac{25}{24}$

$\cos(\theta) = \frac{7}{25}$ $\sec(\theta) = \frac{25}{7}$

$\tan(\theta) = \frac{24}{7}$ $\cot(\theta) = \frac{7}{24}$

10) $\sin(\theta) = \frac{12}{13}$ $\csc(\theta) = \frac{13}{12}$

$\cos(\theta) = \frac{5}{13}$ $\sec(\theta) = \frac{13}{5}$

$\tan(\theta) = \frac{12}{5}$ $\cot(\theta) = \frac{5}{12}$