

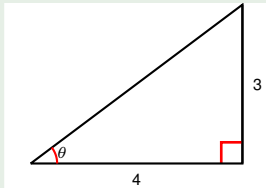
## Precalculus

# Compute the trigonometric functions in a right angle triangle, part 1

Todor Milev

2019

## Example

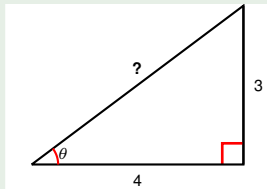


<sup>3</sup> Let the angle  $\theta$  be as indicated in the figure. Find the values of the six trigonometric functions of  $\theta$ .

$$\sin \theta = \quad \cos \theta = \quad \tan \theta =$$

$$\csc \theta = \quad \sec \theta = \quad \cot \theta =$$

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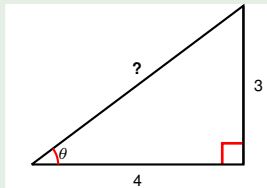
<sup>3</sup> Let the angle  $\theta$  be as indicated in the figure. Find the values of the six trigonometric functions of  $\theta$ .

To find the trigonometric functions, we need to know the length of the hypotenuse.

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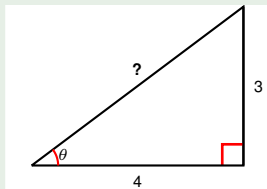
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hypotenuse = ?

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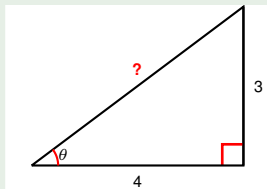
To find the trigonometric functions, we need to know the length of the hypotenuse.

$$\text{hypotenuse} = \sqrt{4^2 + 3^2}$$

$$\sin \theta = \quad \cos \theta = \quad \tan \theta =$$

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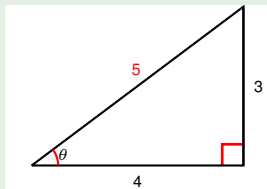
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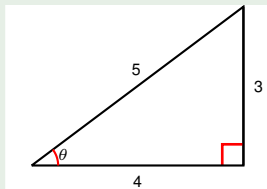
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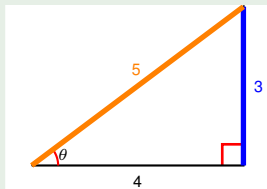
Using the right angle triangle ratio interpretations of the trig functions, we can compute:

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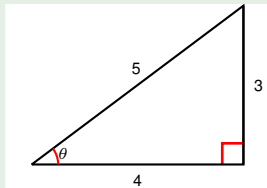
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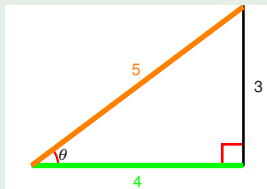
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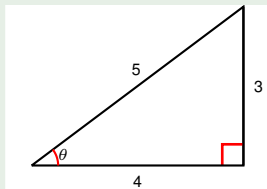
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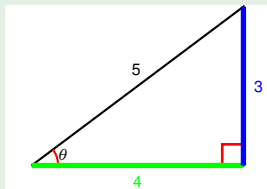
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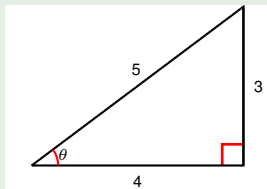
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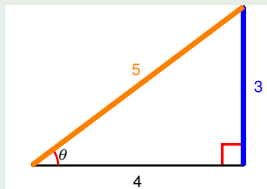
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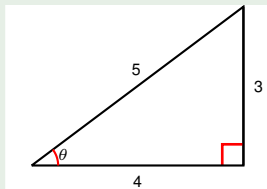
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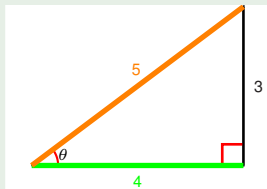
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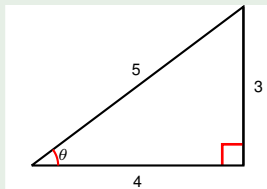
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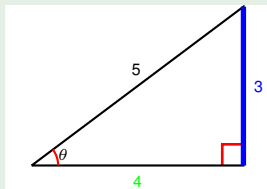
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