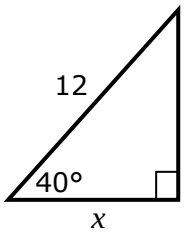
Routine Trigonometry Practice #1

Find the unknown side, x, or angle, θ.

1.



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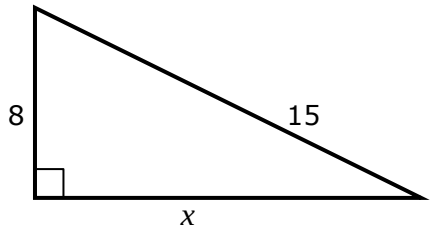

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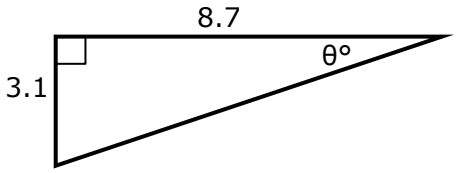

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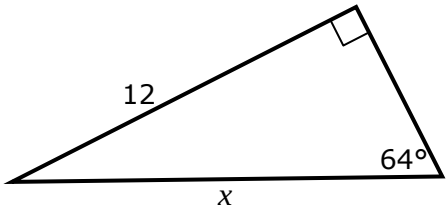

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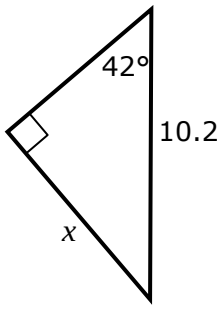

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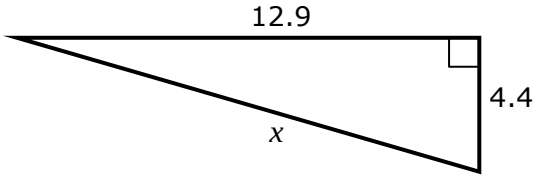

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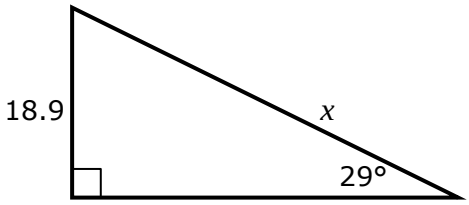
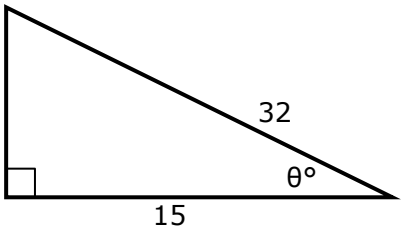


8.



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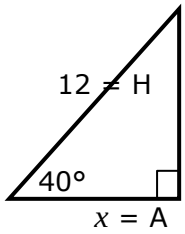
Answers: Routine Trigonometry Practice #1

Find the unknown side, x, or angle, θ.

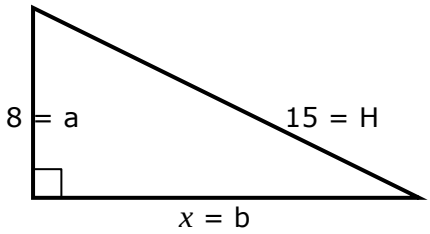
1.



C A H

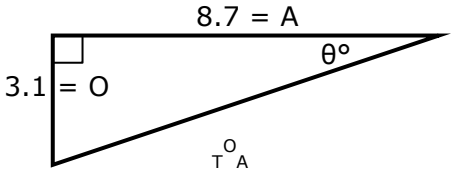
A = C × H
= cos 40° × 12
= **9.19**

2.



$b^2 = H^2 - a^2$
$= 15^2 - 8^2 = 161$
$b = \sqrt{161}$
= **12.69**

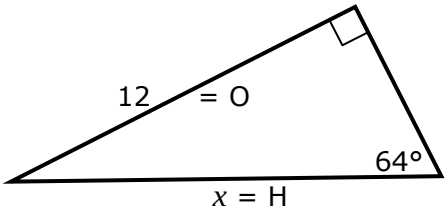
3.



T O A

T = O ÷ A
θ = $\tan^{-1}$ (3.1 ÷ 8.7)
= **19.6°**

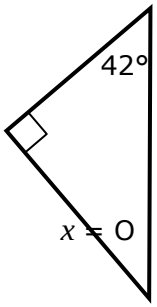
4.



S O H

H = O ÷ S
= 12 ÷ sin 64°
= 13.35

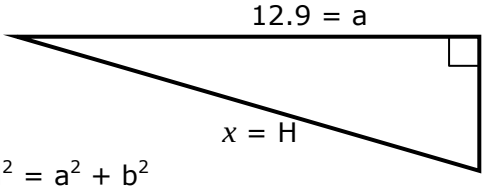
5.



S O H

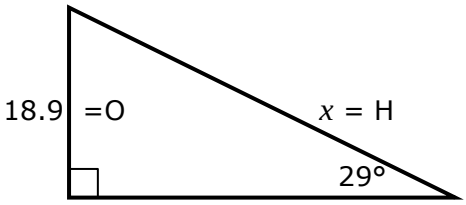
O = S × H
= sin 42° × 10.2
= **6.83**

6.



$H^2 = a^2 + b^2$
$= 12.9^2 + 4.4^2 = 185.77$
$b = \sqrt{185.77}$
= **13.63**

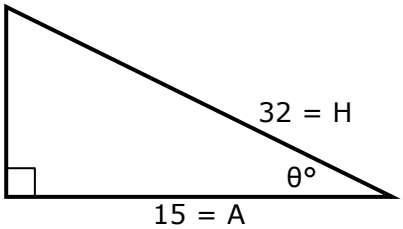
7.



S O H

H = O ÷ S
= 18.9 ÷ sin 29°
= **38.98**

8.



C A H

C = A ÷ H
θ = $\cos^{-1}$ (15 ÷ 32)
= **62.0°**

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