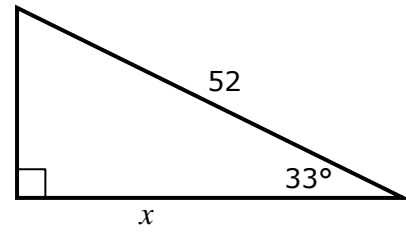


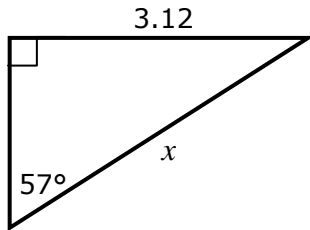
Routine Trigonometry Practice #3

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

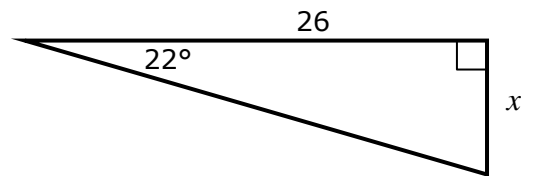
1.



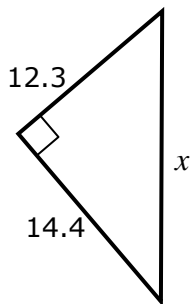
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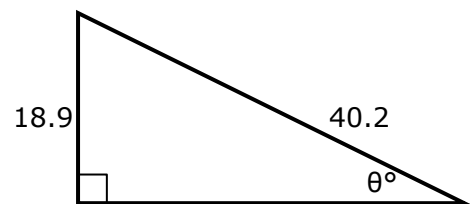
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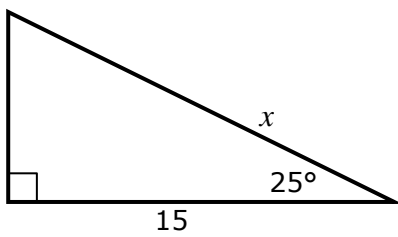
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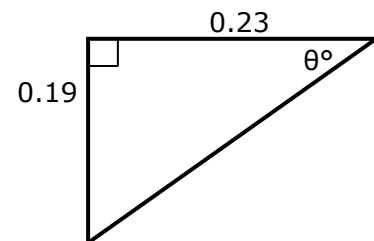
5.



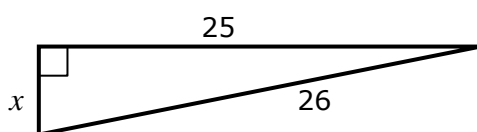
6.



7.

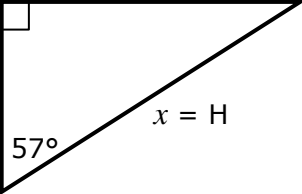


8.

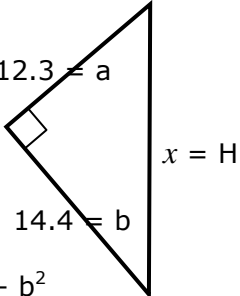


Answers: Routine Trigonometry Practice #3

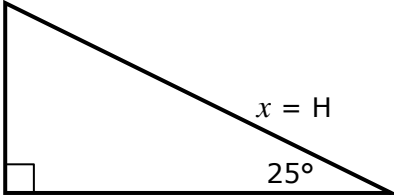
Find the unknown side, x , or angle, θ .

2.  $3.12 = O$
 57°
 $x = H$

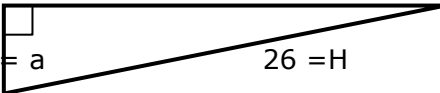
S^O_H
 $H = O \div S$
 $= 3.12 \div \sin 57^\circ$
 $= 3.72$

4.  $12.3 = a$
 $14.4 = b$
 $x = H$

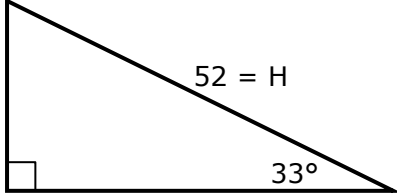
$H^2 = a^2 + b^2$
 $= 12.3^2 + 14.4^2 = 358.65$
 $b = \sqrt{358.65}$
 $= 18.94$

6.  $x = H$
 25°
 $15 = A$

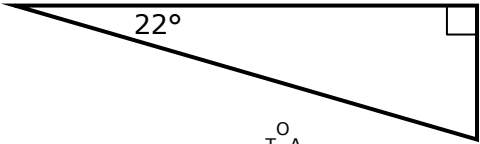
C^A_H
 $H = A \div C$
 $= 15 \div \cos 25^\circ$
 $= 16.55$

8.  $25 = b$
 $x = a$
 $26 = H$

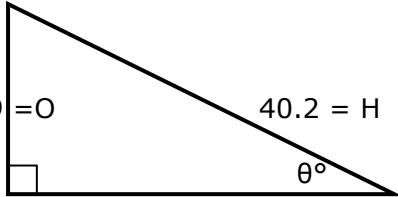
$a^2 = H^2 - b^2$
 $= 26^2 - 25^2 = 51$
 $a = \sqrt{51}$
 $= 7.14$

1.  $52 = H$
 33°
 $x = A$

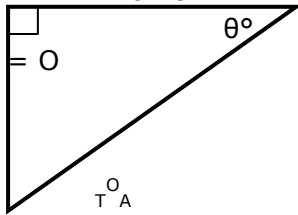
C^A_H
 $A = C \times H$
 $= \cos 33^\circ \times 52$
 $= 43.6$

3.  $26 = A$
 22°
 $x = O$

T^O_A
 $O = T \times A$
 $= \tan 22^\circ \times 26$
 $= 10.50$

5.  $18.9 = O$
 $40.2 = H$
 θ°

S^O_H
 $S = O \div H$
 $\theta = \sin^{-1}(18.9 \div 40.2)$
 $= 28.0^\circ$

7.  $0.23 = A$
 $0.19 = O$
 θ°

T^O_A
 $T = O \div A$
 $\theta = \tan^{-1}(0.19 \div 0.23)$
 $= 39.56^\circ$