

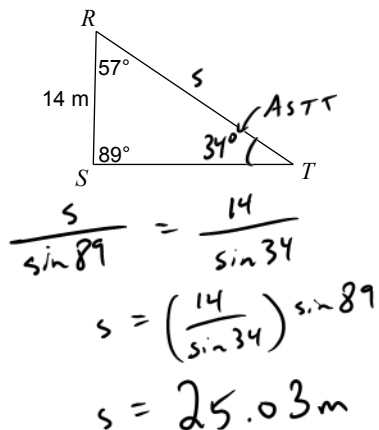
Note: Similar Triangle Problems Are Not ~~Name~~ included in this review.

~~Right Triangles~~: SOH CAH TOA, Sine Law & Cosine Law

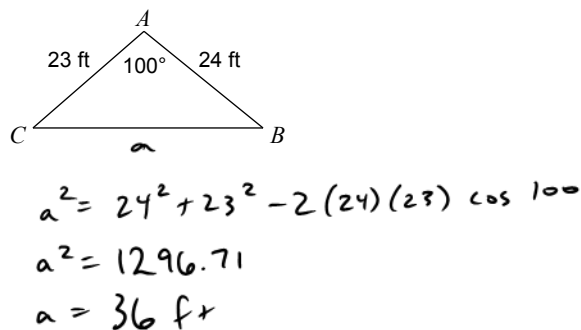
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Find each measurement indicated. Round your answers to the nearest tenth.

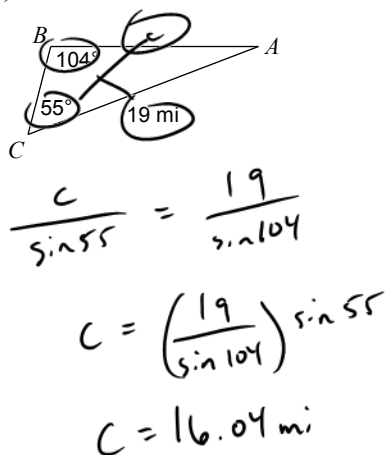
1) Find RT



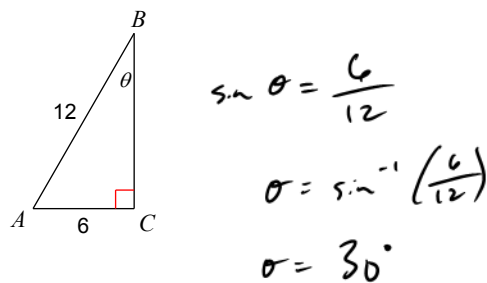
2) Find BC



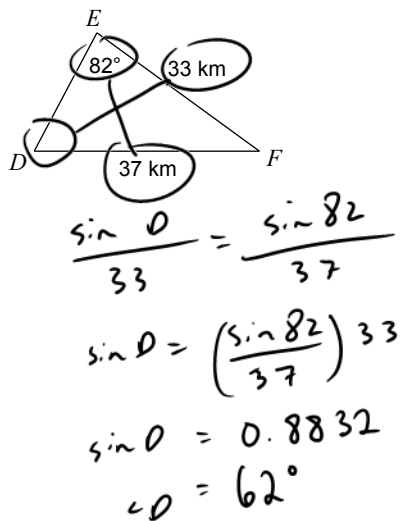
3) Find AB



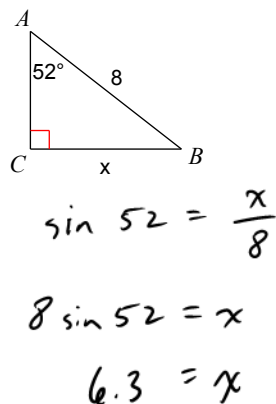
4)



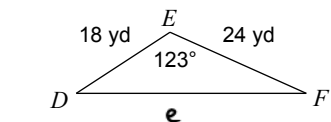
5) Find $m\angle D$



6)



7) Find $m\angle F$



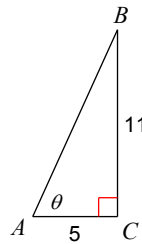
Find e first

$$e^2 = 18^2 + 24^2 - 2(18)(24)\cos 123$$

$$e^2 = 1370.57$$

$$e = 37 \text{ yd}$$

8)

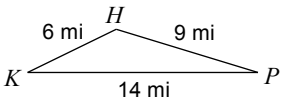


$$\tan \theta = \frac{11}{5}$$

$$\theta = \tan^{-1}\left(\frac{11}{5}\right)$$

$$\theta = 66^\circ$$

9) Find $m\angle H$



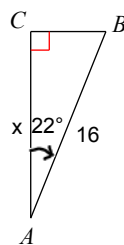
$$\cos H = \frac{6^2 + 9^2 - 14^2}{2(6)(9)}$$

$$\cos H = \frac{-79}{108}$$

$$\angle H = \cos^{-1}\left(\frac{-79}{108}\right)$$

$$\angle H = 137^\circ$$

10)

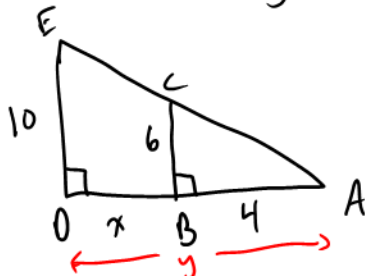


$$\cos 22 = \frac{x}{16}$$

$$16 \cos 22 = x$$

$$14.8 = x$$

11) Prove Similarity then solve for x .



$\angle A = \angle A$ given

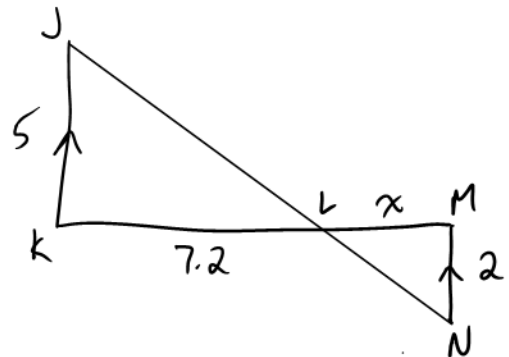
$\angle ADE = \angle ABC$ given

$\triangle ADE \sim \triangle ABC$ (AA~)

$$\frac{6}{10} = \frac{4}{y}$$

$$6y = 40$$

$$y = 6.7 \quad \therefore \frac{x = 6.7 - 4}{\boxed{x = 2.7}}$$



$\angle KJL = \angle MNL$ O.A.T.

$\angle J = \angle N$ P.L.T (2 part.)

$\triangle KJL \sim \triangle MNL$ (AA~)

$$\frac{x}{7.2} = \frac{2}{5}$$

$$5x = 14.4$$

$$\boxed{x = 2.88}$$