

Warm up: Simplify

$$g^2 \times g^{-6}$$

$$h^{-4} \times h^{-3}$$

$$j^{-7} \times j^{10}$$

$$a^{-9} \times a^3$$

$$\frac{a^3}{a^{-2}}$$

$$\frac{b^{-5}}{b^{-7}}$$

$$\frac{k^7}{k^{-10}}$$

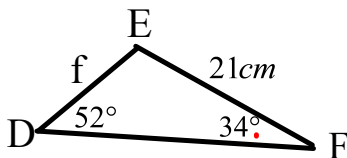
1.4 Sine Law

Reminder: MSIP Assignment is due Friday p. 26, #1-9

Sine Law: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

P. 31 #1a

1. Find the indicated side or angle:



$$\frac{f}{\sin F} = \frac{21}{\sin D}$$

$$\frac{f}{\sin 34} = \frac{21}{\sin 52}$$

$$f \times \sin 52 = 21 \times \sin 34$$

$$f = \frac{21 \times \sin 34}{\sin 52}$$

$$f = 14.9\text{cm}$$

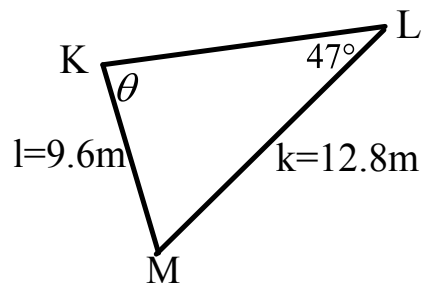
Determine
Ratios to use

Substitute
Values Given

Solve

p. 31 #2a

1. Find the indicated side or angle:



$$\frac{k}{\sin K} = \frac{l}{\sin L}$$

$$\frac{12.8}{\sin \theta} = \frac{9.6}{\sin 47}$$

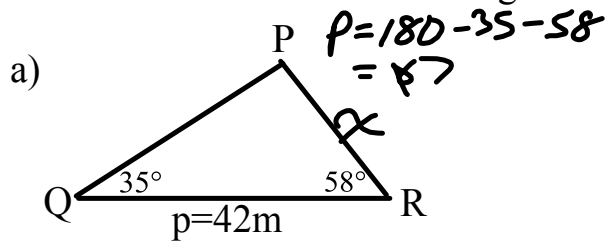
p. 32, #8 together

$$9.6 \sin \theta = 12.8 \times \sin 47$$

$$\sin \theta = \frac{12.8 \times \sin 47}{9.6}$$

$$\theta = 77^\circ$$

Find the indicated side or angle:



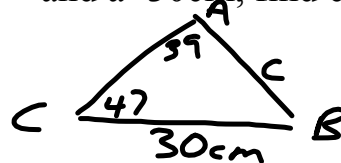
$$\frac{x}{\sin 35} = \frac{42}{\sin 87}$$

$$x \sin 87 = 42 \times \sin 35$$

$$x = \frac{42 \times \sin 35}{\sin 87}$$

$$x = 24.1 \text{ m}$$

b) Triangle ABC where $A=39^\circ$, $C=47^\circ$ and $a=30\text{cm}$, find c



$$c \doteq 34.86 \text{ cm}$$

p. 32, #10

Homework

① p. p. 31 #1a,2a,4c, 8,10,12,13a,14,16
Bonus Question p. 33 #17

② MSIP p. 26 #1-9

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