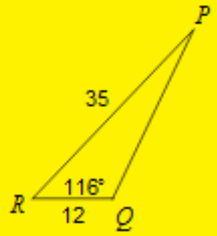
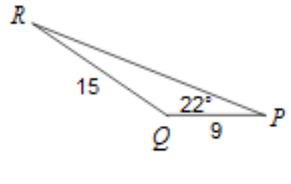
May 15

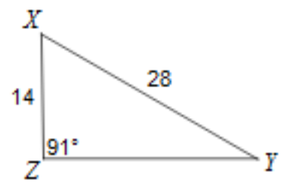
24) Find $m\angle P$



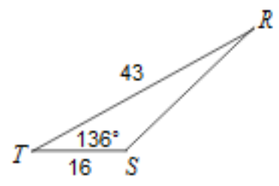
25) Find $m\angle R$



26) Find $m\angle Y$

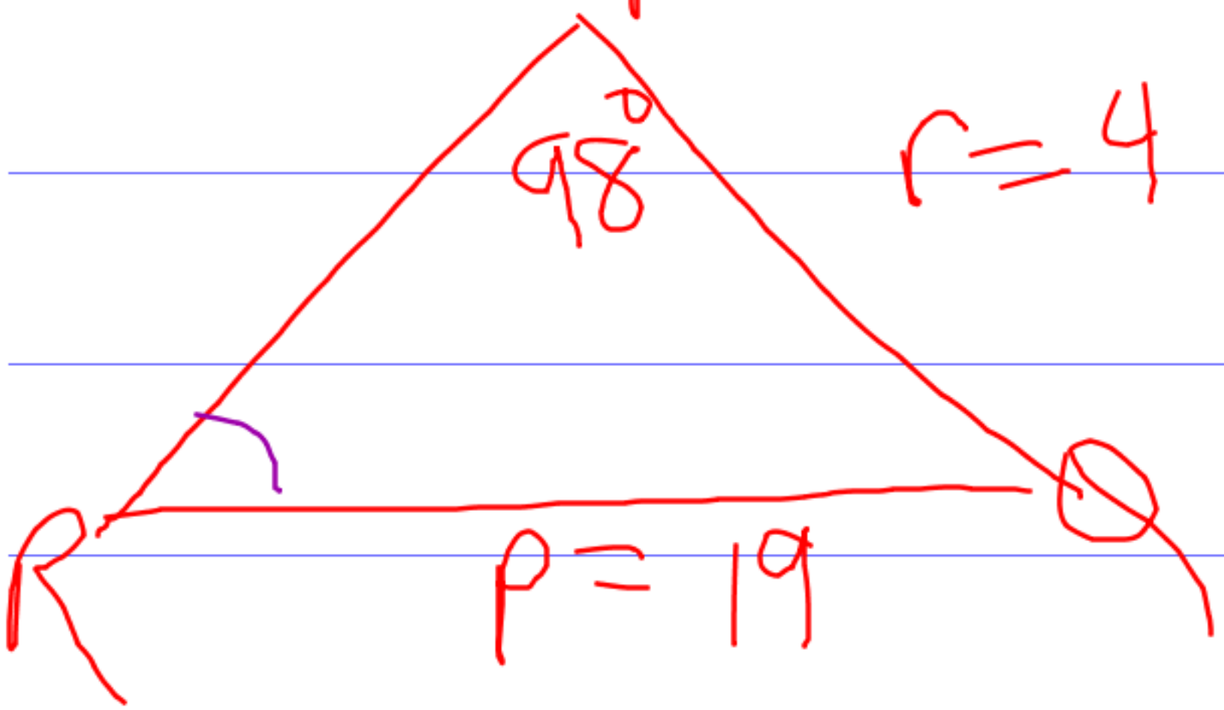


27) Find $m\angle R$



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

30) In ΔPQR, $m\angle P = 98°$, $r = 4$, $p = 19$
Find $m\angle R$



$$\frac{\sin R}{r} = \frac{\sin P}{p}$$

$$\frac{\sin R}{4} = \frac{\sin 98}{19}$$

$$\frac{19 \sin R}{19} = \frac{4 \sin 98}{19}$$

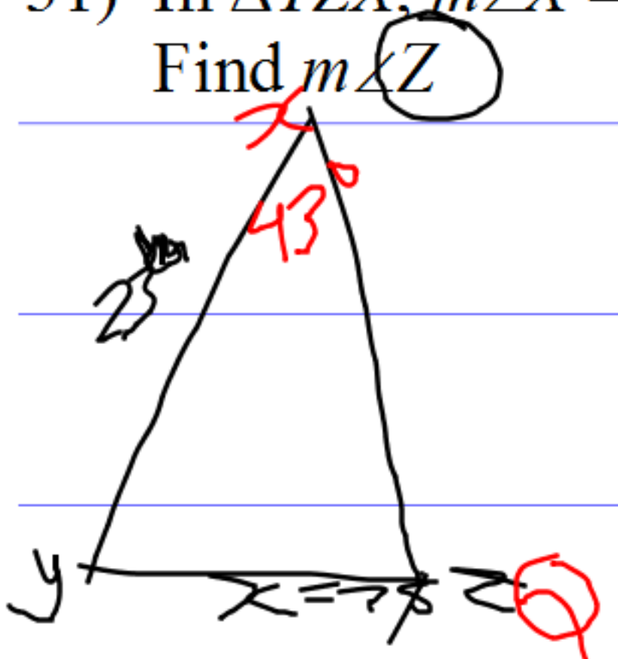
$$\sin R \approx 0.2054$$

$$\sin^{-1} R = 12.05$$

$$R = 12.05$$

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

31) In ΔYZX, $m\angle X = 43°$, $x = 28$, $z = 23$
Find $m\angle Z$



$$\frac{\sin Z}{z} = \frac{\sin X}{x}$$

$$\frac{\sin Z}{23} = \frac{\sin 43°}{28}$$

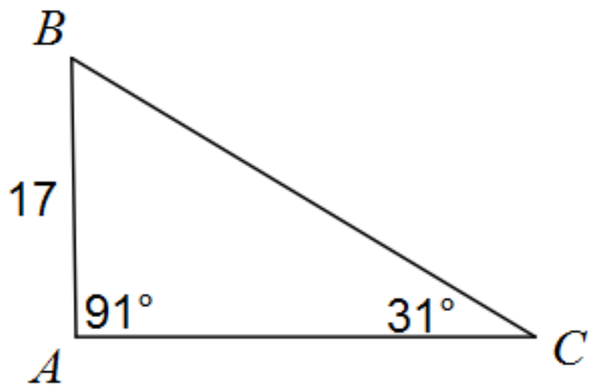
$$\frac{28 \sin Z}{28} = \frac{23 \sin 43}{28}$$

$$\sin Z = 0.5602$$

$$Z = 34°$$

Solve each triangle. Round your answers to the nearest tenth.

34)



$\angle B = 180 - (91 + 31)$

$\angle B = 180 - 122$

$\angle B = 58°$

$\angle A = 91°$ $a = 33$

$\angle B = 58$ $b = 28$

$\angle C = 31°$ $c = 17$

$\frac{a}{\sin A} = \frac{c}{\sin C}$

$\frac{a}{\sin 91} = \frac{17}{\sin 31}$

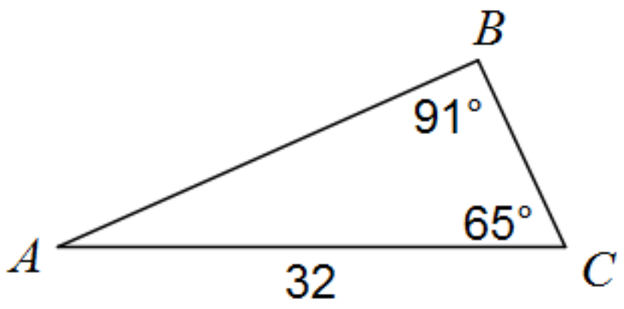
$a \sin 31 = 17 \sin 91$

$\frac{a \sin 31}{\sin 31} = \frac{17 \sin 91}{\sin 31}$

$a = 33$

Solve each triangle. Round your answers to the nearest tenth.

35)



$\angle A = 24^\circ \quad a = 13$

$\angle B = 91^\circ \quad b = 32$

$\angle C = 65^\circ \quad c = 24$

$\angle A = 180 - 91 + 65$

$\angle A = 180 - 156 = 24^\circ$

$\frac{b}{\sin B} = \frac{c}{\sin}$

$\frac{32}{\sin 91} \times \sin 65$

$\frac{a}{\sin a} = \frac{c}{\sin c}$

$\frac{a}{\sin 24} = \frac{29}{\sin 65}$

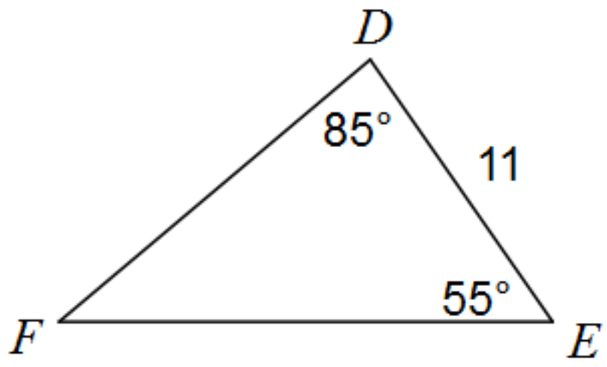
$\frac{a \sin 65}{\sin 65} = \frac{29 \sin 24}{\sin 65}$

$a = 13$

$\frac{32 \sin 65}{\sin 91} = \frac{c \sin 91}{\sin 91} \quad c = 29$

Solve each triangle. Round your answers to the nearest tenth.

36)



$\angle D = 85^\circ \quad d = 17.1$

$\angle E = 55^\circ \quad e = 14$

$\angle F = 40^\circ \quad f = 11$

$180-(85+55) =$

$180 - 140 = 40$

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

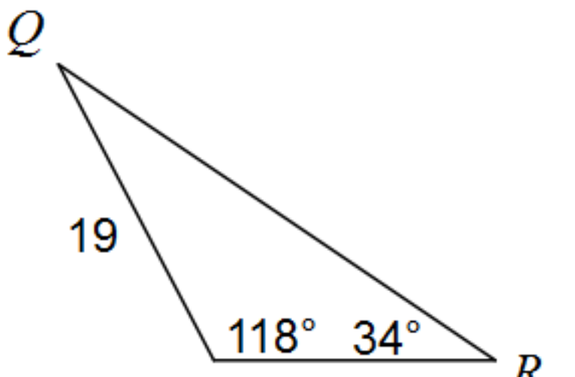
$\frac{d}{\sin 85^\circ} = \frac{11}{\sin 40^\circ}$

$d = 17.1$

$\frac{d \sin 40}{\sin 40} = \frac{11 \sin 85^\circ}{\sin 40}$

Solve each triangle. Round your answers to the nearest tenth.

37)



$\angle P = 118^\circ$

$\angle Q = 28^\circ$

$\angle R = 34^\circ$

$P = 32$

$q = 16$

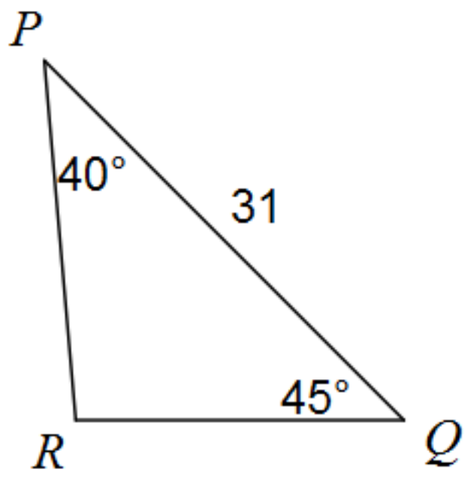
$r = 19$

$\angle Q = 180 - (118 + 34)$

$\angle Q = 28$

Solve each triangle. Round your answers to the nearest tenth.

38)



$\angle P = 40°$ $p = 20$

$\angle Q = 45°$ $q = 22$

$\angle R = 95°$ $r = 31$

$\angle R = 180 - (40 + 45)$

$\angle R = 95°$

Solve each triangle. Round your answers to the nearest tenth.

38)