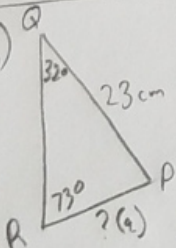


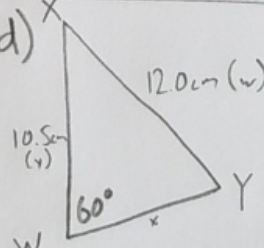
② a) $\frac{\sin 43^\circ}{27.2\text{cm}} = \frac{\sin 72^\circ}{b}$
 $\sin 43^\circ \times b = \sin 72^\circ \times 27.2\text{cm}$
 $\frac{\sin 43^\circ \times b}{\sin 43^\circ} = \frac{25.8687}{\sin 43^\circ}$
 $b = 37.93$

② b) $\frac{\sin C}{37.1\text{cm}} = \frac{\sin 44^\circ}{29.5\text{cm}}$
 $\sin C \times 29.5\text{cm} = \sin 44^\circ \times 37.1\text{cm}$
 $\frac{\sin C \times 29.5\text{cm}}{29.5\text{cm}} = \frac{25.7718}{29.5\text{cm}}$
 $\sin C = 0.8736$ * kept all digits in calc to find angle.
 $\sin^{-1}(0.8736) = 60.88^\circ$

③ a) $\frac{\sin D}{d} = \frac{\sin F}{f}$
 $\frac{\sin 53^\circ}{d} = \frac{\sin 59^\circ}{22.5\text{cm}}$
 $d \times \sin 59^\circ = \sin 53^\circ \times 22.5\text{cm}$
 $\frac{d \times \sin 59^\circ}{\sin 59^\circ} = \frac{17.9693}{\sin 59^\circ}$
 $d = 20.96\text{cm}$

d) $\frac{\sin 29^\circ}{24.4\text{cm}} = \frac{\sin N}{45.2\text{cm}}$
 $\frac{21.9134}{24.4\text{cm}} = \frac{\sin N \times 24.4\text{cm}}{24.4\text{cm}}$
 $0.8981 = \sin N$
 $63.91^\circ = \sin^{-1}(0.8981)$

⑥ b)  $\frac{\sin Q}{q} = \frac{\sin R}{r}$
 $\frac{\sin 32^\circ}{q} = \frac{\sin 73^\circ}{23\text{cm}}$
 $q \times \sin 73^\circ = 12.1881$
 $\frac{q \times \sin 73^\circ}{\sin 73^\circ} = \frac{12.1881}{\sin 73^\circ}$
 $q = 12.75\text{cm}$

d)  $\frac{\sin Y}{10.5\text{cm}} = \frac{\sin 60^\circ}{12.0\text{cm}}$
 $\sin Y \times 12.0\text{cm} = \sin 60^\circ \times 10.5\text{cm}$
 $\frac{\sin Y \times 12.0\text{cm}}{12.0\text{cm}} = \frac{9.0933}{12.0\text{cm}}$
 $\sin Y = 0.7578$
 $\sin^{-1}(0.7578) = 49.27^\circ$