Trigonometry 1
Geometry
Give the six trigonometric ratios for the followings triangles.


3)



Use $\Delta \mathrm{XYZ}$ to name the hypotenuse, opposite side, and adjacent side for each reference angle.
5) $\angle X$
6) $\angle Y$


Use $\Delta$ TVW to name the hypotenuse, opposite side, and adjacent side for each reference angle.
7) $\angle T$
8) $\angle W$


Use $\triangle \mathrm{QRS}$ to find each trigonometric ratio. Then use a calculator to approximate each ratio to four decimal places.
9) $\frac{\text { Opposite } \angle Q}{\text { Hypostenuse }}=$
10) $\frac{\text { Adjacent } \angle S}{\text { Opposite } \angle S}=$
11) $\frac{\text { Hypotenuse }}{\text { Adjacent } \angle S}=$
12) $\frac{\text { Opposite } \angle R}{\text { Adjacent } \angle R}=$


In the figure at the right the ratio $\frac{\text { Opposite } \angle A}{\text { Adjacent } \angle A}=\frac{8}{15}$.
13) If $B C=16$, find lengths $A B$ and $A C$.

14 If $\mathrm{AB}=75$, find lengths BC and AC .


In the figure at the right the ratio $\frac{\text { Opposite } \angle P}{\text { Hypotenuse }}=\frac{12}{37}$.
15) If $\mathrm{PR}=105$, find lengths PQ and QR .

16) If $\mathrm{PQ}=185$, find lengths PR and QR .

