### 2.4 Sine and Cosine

If $\angle \mathrm{A}$ is an acute angle in a right triangle, then:
$\sin \angle A=$ $\qquad$
$\cos \angle \mathrm{A}=$ $\qquad$
 remember: SOH

CAH
TOA
$\operatorname{Sin}=\quad \operatorname{Cos}=\quad$ Tan $=$
ex . Determine the $\cos$ and $\sin$ of $\angle \mathrm{P}$ and $\angle \mathrm{Q}$

ex. Determine the measure of $\angle \mathrm{P}$ and $\angle \mathrm{Q}$ to the nearest degree.
ex. Drunken trees are a result of melting permafrost in the far north. Find the angle of a tree if it was originally 15.3 m tall but now stands only 14 m high.

### 2.5 Determining Lengths with Sine and Cosine

ex. Determine the length of $\overline{\mathrm{RS}}$ to the nearest tenth of a meter.

ex. Determine the length of $\overline{\mathrm{MN}}$ to the nearest tenth of a meter.
ex. What is the distance between tower $A$ and tower $B$ to the nearest meter?


