Trigonometric Ratios
In the left column, record the solution set-up for the five questions as discussed in the activity. Then return to the right column and begin the solution set-up for the unknown (?) side or angle. Save your work in your ePortfolio. You will return to complete the solution at a later date.

You do not determine or solve for the unknown value at this time.

|  | Example from the activity: | Your turn: |
| :---: | :---: | :---: |
| 1 |  |  |
|  | solution set-up $\begin{aligned} & \sin \angle D=\frac{o p p}{h y p} \\ & \sin 55^{\circ}=\frac{24}{2} \end{aligned}$ | solution set-up $\begin{aligned} & \sin \angle D=\frac{o p p}{h y p} \\ & \sin 63^{\circ}=\frac{47}{?} \end{aligned}$ |


|  | Example from the activity: | Your turn: |
| :---: | :---: | :---: |
| 2 |  |  |
|  | solution set-up $\begin{aligned} & \cos \angle p=\frac{\text { adj }}{h y p} \\ & \cos 35^{\circ}=\frac{?}{10} \end{aligned}$ | solution set-up $\begin{aligned} & \cos \angle P=\frac{\text { adj }}{h y p} \\ & \cos 29^{\circ}=\frac{?}{43} \end{aligned}$ |


|  | Example from the activity: | Your turn: |
| :---: | :---: | :---: |
| 3 |  |  |
|  | solution set-up $\begin{aligned} & f^{2}+d^{2}=e^{2} \\ & (12)^{2}+d^{2}=20^{2} \end{aligned}$ | solution set-up $\begin{aligned} & f^{2}+d^{2}=e^{2} \\ & f^{2}+23^{2}=54^{2} \end{aligned}$ |


|  | Example from the activity: | Your turn: |
| :---: | :---: | :---: |
| 4 |  |  |
|  | solution set-up $\begin{aligned} & \tan \angle B=\frac{o p p}{a d j} \\ & \tan \angle B=\frac{18}{13} \end{aligned}$ | solution set-up $\begin{aligned} & \tan \angle B=\frac{D p p}{\operatorname{adj}} \\ & \tan \angle B=\frac{27}{13} \end{aligned}$ |


|  | Example from the activity: | Your turn: |
| :---: | :---: | :---: |
| 5 |  | A 5 m ladder leans against the wall and rests at a point 4.6 $m$ above the ground. What is the angle between the ground and the ladder? |
|  | solution set-up $\begin{aligned} & \tan \angle P=\frac{o p p}{\operatorname{adj}} \\ & \tan 38^{\circ}=\frac{?}{57} \end{aligned}$ | solution set-up $\begin{aligned} & \sin \angle W=\frac{O P P}{h y p} \\ & \sin \angle W=\frac{4 \cdot 6}{5} \end{aligned}$ |

$$
\begin{aligned}
& \tan (\text { angle })=\frac{\text { opposite }}{\text { adjacent }} \\
& \tan 16^{\circ}=\frac{25}{?}
\end{aligned}
$$

