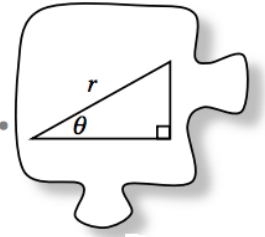


# 4.2.4 How can I use trig ratios?

## Trigonometric Applications



### 4-89 - Climbing in Yosemite

Draw and label the triangle created on the picture below.



a) How long is the rope between David and and carabiner above Emily?

b) How high up the wall has Emily climbed? Show all work.

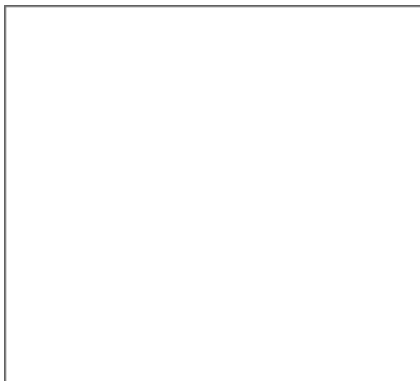
### 4-90 - Circus (Draw a diagram and show all equations and calculations.)



a) How long is the cable? Show your equation and calculations.

b) How far from the pole should the cable be attached to the ground? Show your equation and calculations.

### 4-91 - Back to El Capitan (Draw a diagram and show all equations and calculations.)



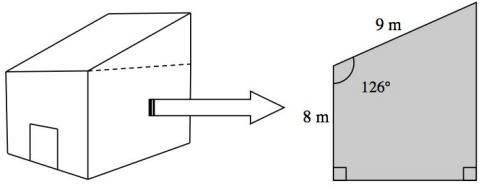
a) How high is Emily at 11:00am?

b) How far has Emily climbed in the last 30 minutes?

c) If Emily climbs 32 feet higher in ten more minutes, at what angle will Nathan have to look in order to see Emily?

### 4-92 - Repainting a House

a) Determine the area that will be painted. Show all work.



b) How many cans of paint should Forest buy? Show all work.

### Application Problems:

Find the missing side lengths or angle measures using the trigonometric function of your choice.

<p>a</p>	<p>b</p>	<p>c</p>	<p>d</p>
<p>e</p>	<p>f</p>	<p>g</p>	<p>h</p>