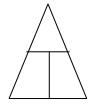# Check For Understanding
Force, Mass, Acceleration

Use the following equation to answer the questions below. Be sure to show your work,and don't forget to label the units! Fill in the triangle to help with your calculations.

$$\text{Force (N)} = \text{mass (kg)} \times \text{acceleration (m/s}^2)$$

1. A remote-control car has a mass of 1.5 kg. Its electric motor accelerates the car at 6 m/s^2. What force does the motor provide?

   Force:

   Mass:

   Acceleration:

2. 2000 N of force cause an elevator to accelerate at 2 m/s^2? What is the mass of the elevator?

   Force:

   Mass:

   Acceleration:

3. A bow applies 25 N of force to an arrow with a mass of 2 kg. What is the acceleration of the arrow?

   Force:

   Mass:

   Acceleration: