## Module 2: Applications

"Climb mountains not so the world can see you, but so that you can see the world."

### 2.7 Problem Solving

Perimeter: The $\qquad$ of all the sides of a shape.

Units of perimeter: $\qquad$
Perimeter of a Rectangle: $\qquad$

Ex. Find the perimeter of the rectangle with the following dimensions: length $=21 \mathrm{~cm}$, width $=12 \mathrm{~cm}$

Ex. Find the length of the rectangle with the following dimensions: perimeter $=78 \mathrm{~m}$, width $=11 \mathrm{~m}$

Area: Amount of $\qquad$ in a 2-dimensional object.

Units of area: $\qquad$
Area of a Square: $\qquad$
Area of a Rectangle: $\qquad$
Area of a Circle: $\qquad$
Area of a Triangle: $\qquad$

Ex. Find the area of the square with the following dimensions: side $=10 \mathrm{~m}$

Ex. Driveway pavers are $4 \mathrm{in} . \times 6 \mathrm{in}$. A driveway is 7488 square inches, how many pavers are needed?

Ex. Find the area of the triangle with the following dimensions: height $=2 \mathrm{~km}$, base $=6 \mathrm{~km}$

## Translating Word Problems

Words associated with Addition:

Words associated with Subtraction:

Words associated with Multiplication:

Words associated with Division:

Words associated with Equals:

Ex. Rectangle is 25 ft . wide. The length is 5 ft . more than twice the width. What is the area?

Ex. Rectangle is twice as long as it is wide, and its perimeter is 36 meters. Find the width.

Ex. Length of a rectangle is 8 feet. longer than its width. The perimeter is 184 feet. Find the width.

Simple Interest:
I: $\qquad$ $P$ : $\qquad$
r: $\qquad$ t: $\qquad$
Ex. Investment of $\$ 12000$. In one year there was
$\$ 816$ of interest. What was the interest rate?

Ex. Borrow $\$ 3000$ at $3.5 \%$ interest rate. You pay
$\$ 735$ in interest. How many years was the loan for?

Percentage: The word "of" means to $\qquad$
Ex. $40 \%$ of 230 is what?

Ex. At a restaurant, the bill is $\$ 25$. You decide to leave a $15 \%$ tip. How much did you leave?

Ex. What \% of 280 is 78.4 ?

Percent of Change: $\qquad$ $\times 100$

Ex. If 11 is increased to 17 , the increase is what percent of the original number?

Ex. Paid $\$ 145$ for an item originally priced at $\$ 480$.
What percent of the original price did you pay?

Homework Checklis $\dagger$
$\square$ Module 2: Applications

