$\qquad$

## Skills Maintenance

## Variables and Substitution

## Activity 1

Substitute the given value for the variable and solve.

1. $x+50$

Substitute $x=25$.
Solve $\qquad$
3. $30 \cdot w$

Substitute $w=50$.
Solve $\qquad$
2. $y-112$

Substitute $y=500$.
Solve $\qquad$
4. $m \div 20$

Substitute $m=100$.
Solve $\qquad$
5. $500-n$

Substitute $n=250$
Solve $\qquad$

## Activity 2

Tell the ratio in each of the problems.

1. There are 25 dogs at the kennel and 15 cats. What is the dog-tocat ratio?
$\qquad$
2. There are $\mathbf{1 2}$ girls in a classroom of 22 students. What is the girl-toboy ratio?
$\qquad$
3. A recipe calls for 3 cups of sugar and 1 cup of flour. What is the flour-to-sugar ratio in the recipe?
$\qquad$

## $\stackrel{\%}{\overline{=}} \div$ Apply Skills <br> Using Variables in Formulas

## Activity 1

Use the squares on the grid to help you measure the shapes. Find the area of each shape using the appropriate formula. Label your answer in square units.

Area of a rectangle $=1 \cdot \mathrm{w}$
Area of a triangle $=\frac{1}{2} \cdot b \cdot h$
Area of a circle $=3.14 \cdot r^{2}$

1. $r=$ $\qquad$
Area of circle $\qquad$
2. $b=$ $\qquad$
$h=$ $\qquad$
Area of triangle $\qquad$
3. $l=$ $\qquad$
$w=$ $\qquad$
Area of rectangle $\qquad$

$\qquad$

## Activity 2

Substitute the values for the variables in each of the formulas and solve for the missing part.

1. The area of the triangle is 10 square units.

What is the base? $\qquad$


Area Formula for a Triangle:
$A=\frac{1}{2} \cdot b \cdot h$
2. The area of the parallelogram is 30 square units.

What is the height? $\qquad$


Area Formula for a Parallelogram:
$A=b \cdot h$
3. The area of the triangle is 8 square units.

What is the height? $\qquad$


Area Formula for a Triangle:
$A=\frac{1}{2} \cdot b \cdot h$
4. The area of the rectangle is 27 square units.

What is the base? $\qquad$


Area Formula for a Rectangle:
$A=b \cdot h$

## mBook Reinforce Understanding

Use the mBook Study Guide to review lesson concepts.

