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## Skills Maintenance

Distributive Property

## Activity 1

Use the distributive property to simplify each problem.

1. $5(a+2)$ $\qquad$
2. $-2(b+5)$ $\qquad$
3. $2(2+c)$ $\qquad$
4. $d(d+2)$ $\qquad$
5. $2(m-4)$ $\qquad$
6. $-5(2-n)$
$\qquad$

## Problem-Solving Activity

The Volume of Spheres
Find the volume of each sphere using this formula: $V=\frac{4}{3} \pi r^{3}$. Use 3.14 to estimate pi. Show your work.
1.

$r=2$
Show your work here.
2.

$r=4$
Show your work here.

The volume is $\qquad$ .

The volume is $\qquad$ .
3.

4.

$r=6$
Show your work here.
$r=1$
Show your work here.
$\qquad$ .

The volume is $\qquad$ .
$\qquad$

## Problem-Solving Activity

The Volume of Spheres
The Sunland Packing Company packs fresh fruit that is shipped all over the United States. Sunland has a special way of packing a box of fruit. The drawing shows how the grapefruit is packed.

What is the volume of one grapefruit? What is the volume for all the grapefruit? Figure out the dimensions of the box that holds all of the grapefruit. The box should be just big enough so the grapefruit cannot move. Finally compare the volume of all of the grapefruit to the volume for the box that will hold these grapefruit.

2 rows high


The radius of one grapefruit is 3 inches.


Width $=$ ?

Volume of 1 grapefruit $\qquad$
Volume of all grapefruit $\qquad$
Dimensions of the box $\qquad$
Volume of the box $\qquad$

## mBook Reinforce Understanding

Use the mBook Study Guide to review lesson concepts.

