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## Skills Maintenance

Equivalent Ratios

## Activity 1

Look at the pairs of ratios in the problems. Cross out the ratio that needs to be changed so you can compare the two ratios. Then write the equivalent ratio. Circle what is the same in each ratio-the cost or the quantity.

Model | $\frac{\text { bracelets }}{\text { cost }}$ \$6 $\frac{6}{\$ 20} \frac{6}{\$ 15}$ |
| :--- |
| What is the same? (circle one) COST or QUANTITY |

1. $\frac{\text { packs of gum }}{\operatorname{cost}} \frac{3}{\$ 2}$
$\frac{4}{\$ 4}$

What is the same? (circle one) COST or QUANTITY
2. bags of chips $\frac{4}{\$ 12} \quad \frac{2}{\$ 5}$

What is the same? (circle one) COST or QUANTITY
3. $\frac{\text { colas }}{\cos } \frac{6 \text { pack }}{\$ 3} \quad \frac{8 \text { pack }}{\$ 6}$

What is the same? (circle one) COST or QUANTITY

## Lesson 3 Apply Skills

Name Date $\qquad$

## $\%$ Apply Skills <br> Complex Patterns

## Activity 1

Make a table to find the algebraic pattern. Then use the pattern to tell how many circles are in a particular box.
1.

| Box 1 | Box 2 | Box 3 | Box 4 | Box 5 |
| :---: | :---: | :---: | :---: | :---: |
| 0000 | 00000 | 000000 | 0000000 | 0000 <br> 0000 |

(a) Transfer the pattern to a table.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

(b) Analyze the pattern in the table and write the algebraic pattern. $\qquad$
(c) How many circles are in the $10^{\text {th }}$ box? $\qquad$
2.

| Box 1 | Box 2 | Box 3 | Box 4 | Box 5 |
| :---: | :---: | :---: | :---: | :---: |
| 00000 | 000000 | 0000 <br> 000 | 0000 | 00000 |
| 0000 | 0000 |  |  |  |

(a) Transfer the pattern to a table.

(b) Analyze the pattern in the table and write the algebraic pattern. $\qquad$
(c) How many circles are in the $20^{\text {th }}$ box? $\qquad$
$\qquad$
3.

| Box 1 | Box 2 | Box 3 | Box 4 | Box 5 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { OOOOO } \\ & \text { OOOOO } \\ & 0 \end{aligned}$ | $\begin{aligned} & \mathrm{OOOOO} \\ & \mathrm{OOOOO} \\ & \mathrm{OOO} \end{aligned}$ | 00000 00000 000 | $\begin{aligned} & \text { OOOOO } \\ & \text { OOOOO } \\ & \text { OOOO } \end{aligned}$ | 00000 00000 00000 |

(a) Transfer the pattern to a table.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

(b) Analyze the pattern in the table and write the algebraic pattern. $\qquad$
(c) How many circles are in the $100^{\text {th }}$ box? $\qquad$
4.

| Box 1 | Box 2 | Box 3 | Box 4 | Box 5 |
| :---: | :---: | :---: | :---: | :---: |
| 00000 | 00000 | 00000 | 00000 | 00000 |
| 00000 | 00000 | 00000 | 00000 | 00000 |
| 00000 | 00000 | 00000 | 00000 | 00000 |
| 00000 | 00000 | 00000 | 00000 | 00000 |
| 0 | 000 | 0000 | 0000 |  |

(a) Transfer the pattern to a table.

(b) Analyze the pattern in the table and write the algebraic pattern. $\qquad$
(c) How many circles are in the $200^{\text {th }}$ box? $\qquad$

Name $\qquad$ Date $\qquad$

## Problem-Solving Activity

Rounding and Ratios
Look at the sale prices. Use what you know about rounding to the nearest whole number to make comparisons. Find the equivalent ratio to make comparing easier, then substitute the new ratio to make the comparison using colons. Show your work.

| Al's One-Day Bakery Sale |  |
| :--- | :--- |
| 3 pies for $\$ 4.59$ | 6 pies for $\$ 7.99$ |
| 12 donuts for $\$ 4.79$ | 36 donuts for $\$ 12.25$ |
| 2 loaves of bread for $\$ 4.20$ | 6 loaves of bread for $\$ 15.60$ |
| 6 cupcakes for $\$ 2.10$ | 20 cupcakes for 5.89 |
| 2 cakes for $\$ 6.99$ | $?$ |

1. What is the best deal on pies? $\qquad$
2. What is the best deal on bread? $\qquad$
3. What is the best deal on cupcakes? $\qquad$
4. Write a ratio for five cakes that is a better deal than two cakes for \$6.99.
