**Reteaching 3-7**

**Objective:** Find percent of change

**Materials:** About 35 counters such as beans or paper clips

Use this ratio to find the percent of change from an original amount to a new amount:

\[
\text{percent of change} = \frac{\text{amount of change}}{\text{original amount}}
\]

*Example*

Jana's pay changed from $6/h to $7/h. Find the percent of change in her pay and whether it is a percent of increase or of decrease.

<table>
<thead>
<tr>
<th>original amount</th>
<th>new amount</th>
<th>[\frac{\text{amount of change}}{\text{original amount}} = \frac{1}{6}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6 \cdot \ldots$</td>
<td>$7 \cdot \ldots$</td>
<td></td>
</tr>
</tbody>
</table>

- Divide your paper into two areas, labeled "original amount" on the left and "new amount" on the right.
- Place 6 counters to represent $6 under the original amount and 7 counters under the new amount.
- Find the difference between the amount of counters on the left and on the right.
- Put the counters representing the difference (amount of change) over the counters representing the original amount.
- Write the ratio represented by the counters.
- Write the ratio as a percent.

The percent of increase is \(16\frac{2}{3}\%\).

More counters under the original amount represent a percent of decrease. More counters under the new amount represent a percent of increase.

*Exercises*

Use counters to find each percent of change. Describe the percent as an increase or decrease. Round percents to the nearest integer.

1. 8 in. to 12 in.
2. 7 min to 5 min
3. $3 to $4
4. 2 lb to 4 lb

Find each percent of change. Describe the percent as an increase or decrease. Round percents to the nearest integer.

5. Today eight students leave your classroom.
6. You put 5 pencils in a box that already has 12 pencils.
7. The length of a shadow changes from 75 feet to 65 feet.