Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

**6.5B Percent Error\_Classwork**

*Objective: find percents of increase; find percents of decrease, find percent error. CC.SS.6.RP.3*

*HW: 6.5B worksheet*

|  |  |  |  |
| --- | --- | --- | --- |
| **WARM-UP**

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| --- | --- | --- |
| 1. What number is 25% of 64?
 | 2. 39.2 is what percent of 112? | 3. 5 is 20% of what number? |

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**REVIEW OF PERCENT INCREASE AND DECREASE**

**EXAMPLE 1:**

The table shows population data for a community.

|  |  |  |
| --- | --- | --- |
|  | 1. What is the percent of change from 2007 to 2013? Round to the nearest whole number.
 | 1. Use this percent of change to predict the population in 2019.
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**EXAMPLE 2:**

Suppose the length and the width of the sandbox are doubled.

|  |  |  |
| --- | --- | --- |
|  | 1. Find the percent of change in the perimeter.
 | 1. Find the percent of change in the area.
 |

**EXAMPLE 3:**

Find the new amount.

|  |  |  |
| --- | --- | --- |
| 1. 8 meters increased by 25%
 | 1. 10 liters increased by 60%
 | 1. 50 points decreased by 26%
 |
|  |  |

**EXAMPLE 1:**

You estimate that 200 people attended a school concert. The actual attendance was 240 people. Find the percent error. Round to the nearest tenth.

**PRACTICE PROBLEMS**

|  |  |
| --- | --- |
| 1. Dennis wants to buy a card for his wife. Dennis calculates the amount of the card as $5.50. The actual price of card is $4. What is Dennis’s percent error?
 | 1. Elena’s math class had 26 students yesterday. She miscounted the class total and recorded it as 20 students. What is Elena’s percent error? Round to the nearest hundredth.
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| 1. Sabrina calculates the cost of a book as $47. The actual price was $56. What is Sabrina’s percent error? Round to the nearest hundredth.
 | 1. Maria thinks the cost to rent scooters was $95. The actual price is $150. What is Maria’s percent error? Round to the nearest hundredth.
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| 1. Jillian calculates that it will take 105 minutes to run 7 miles. She runs the distance in 80 minutes. What is Jillian’s percent error?
 | 1. Hunter thought he purchased an umbrella for $72. The actual price of an umbrella is $50. What is Hunter’s percent error?
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