

## Center 17 - Percent of Change

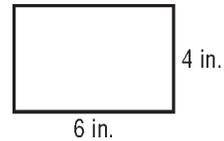
Find each percent of change. Round to the nearest whole percent if necessary. State whether the percent of change is an *increase* or *decrease*.

- |                              |                           |                             |
|------------------------------|---------------------------|-----------------------------|
| 1. 8 feet to 10 feet         | 2. 136 days to 85 days    | 3. \$0.32 to \$0.37         |
| 4. 62 trees to 31 trees      | 5. 51 meters to 68 meters | 6. 16.5 grams to 24.8 grams |
| 7. 0.55 minute to 0.1 minute | 8. \$180 to \$210         |                             |
| 9. 2.9 months to 4.9 months  | 10. 0.5 to 0.75           |                             |
| 11. 0.1 to 0.2               | 12. 1.5 to 0.375          |                             |

13. **SURGERY** Recent developments in surgical procedures change the average healing time for some operations from 8 weeks to 3 weeks.

14. **ROADS** The city added an extra lane in each direction to the 5-lane road.

15. **GEOMETRY** Refer to the rectangle shown. Suppose the width of 4 inches is decreased by 3 inches.



- a. Find the percent of change in the perimeter.
- b. Find the percent of change in the area.

16. **ANALYZE TABLES** Refer to the table that shows the average monthly rainfall during the first six months of the year for Singapore.

Month	Average Rainfall (inches/month)
January	9.4
February	6.5
March	6.8
April	6.6
May	6.7
June	6.4

- a. Between which two consecutive months is the percent of decrease the greatest? What is the percent change to the nearest whole percent?
- b. Between which two consecutive months is the percent of increase the least? What is the percent change to the nearest whole percent?

## Center 18 - Percent Error

**DIRECTIONS:** For each of the following situations, find the percent error involved. Be careful in determining the exact vs. approximate value.

1. Samantha measured the volume of her soda before she drank it for her midmorning snack. She measured the volume of the 12 oz. bottle to be 14 oz.
2. Pablo was directed to weigh a 500 g mass on the balance. After diligently goofing off for ten minutes, he quickly weighed the object and reported 458 g.
3. Valerie had casually recorded her grades for the nine weeks in her notebook. She concluded she had 250 points out of 300 for the grading period. However, her math teacher determined she had 225 out of 300 and awarded her a "C" for the grading period.
4. Dennis wants to buy a card for his wife. Dennis calculates the amount of card as \$4.50. The actual price of the card is \$4.
5. Lina's math class had 24 students yesterday. She miscounted the class total and recorded it as 20 students.