

# 2-10

## Practice

Form K

### Change Expressed as a Percent

Tell whether each percent change is an increase or decrease. Then find the percent change. Round to the nearest percent.

- Original amount: 25 **decrease; 28%**  
New amount: 18
- Original amount: 48 **increase; 50%**  
New amount: 72
- Original amount: 178 **decrease; 24%**  
New amount: 136
- Original amount: 17 **decrease; 12%**  
New amount: 15
- Original amount: 45 **increase; 33%**  
New amount: 60
- Original amount: 95 **decrease; 5%**  
New amount: 90
- A store sells a running suit for \$35. Joey found the same suit online for \$29.  
What is the percent decrease to the nearest percent? **17%**
- An online auction store started the bid on an item at \$19. The item sold for \$49. What was the percent increase to the nearest percent? **158%**
- The original price for a motorcycle was \$11,000. The sale price this week is \$9799. What is the percent decrease to the nearest percent? **11%**

Find the percent error in each estimation. Round to the nearest percent.

- You estimate that a tree is 45 ft tall. It is actually 58 ft tall. **22%**
- A carpenter estimates the wall is 20 ft tall. The wall is actually 18 ft tall. **11%**

**2-10****Practice** (continued)

Form K

## Change Expressed as a Percent

A measurement is given. Find the minimum and maximum possible measurements.

12. A patient weighs 178 lb to the nearest quarter pound. **177.75 lb; 178.25 lb**

13. A board is cut to 28 in. to the nearest half in. **27.75 in.; 28.25 in.**

Find the percent change. Round to the nearest percent.

14. \$158.49 to \$149.99 **5%**

15.  $29\frac{1}{2}$  oz to  $23\frac{1}{4}$  oz **21%**

16.  $12\frac{1}{4}$  hr to  $13\frac{1}{2}$  hr **10%**

17. 7 in. to  $12\frac{1}{2}$  in. **79%**

The measured dimensions of a rectangle are given to the nearest whole unit. Find the minimum and maximum possible areas of each rectangle.

18. 25 in. by 22 in.

**526.75 in.<sup>2</sup>; 573.75 in.<sup>2</sup>**

19. 5 m by 7 m

**29.25 m<sup>2</sup>; 41.25 m<sup>2</sup>**

The measured dimensions of a shape are given to the nearest whole unit. Find the greatest percent error of each shape.

20. The perimeter of a rectangle with length 15 cm and width 21 cm. **3%**

21. The area of a triangle with base length 32 in. and height 25 in. **4%**