Find the percent of increase.

1. original score: 100; new score: 118

2. original record: 25 s; new record: 35 s

3. original weight: 150 lb; new weight: 180 lb

4. original price: $15; new price: $25

5. original length: 23 m; new length: 46 m

Find the percent of decrease.

6. original number of boxes: 40; new number of boxes: 14

7. original cost: $100; new cost: $79

8. original population: 500; new population: 460

9. original number of students: 144; new number of students: 20

10. original fare: $250; new fare: $240

11. Last week Suzanne earned $15 doing errands. This week she earned $40. Find the percent of increase in Suzanne's pay.

12. Kyle bought a painting for $600 and later sold it for $800. Find the percent of increase in the value of the painting.

13. The original price of a jacket is $144. The new price is $54. Find the rate of discount.

14. A runner finished a race in 10.5 s. In the next race the runner finished in 9.8 s. Find the percent of decrease in the running time.

Tell whether there is an *increase* or a *decrease*. Then find the percent of increase or decrease.

15. original number of acres: 40; new number of acres: 90

16. original weight: 16 kg; new weight: 21 kg

17. original population: 3.6 million; new population: 3 million

18. original length: 2.5 cm; new length: 1.25 cm

19. **WRITING ABOUT MATHEMATICS** Write a paragraph to a friend describing how to find the percent of decrease from $15 to $13.80.

THINKING SKILLS

Decide whether each statement is *True* or *False*. Give a convincing argument to support your answer.

20. Twice an amount is the same as an increase of 200%.

21. Half an amount is the same as a decrease of 50%.

SPIRAL REVIEW

22. Solve: $1.4x + 0.4 = 20$ (*Lesson 8-8*)

23. Write the ratio 3 min: 10 s as a fraction in lowest terms.   (*Lesson 9-1*)

24. Write $\frac{17}{20}$ as a decimal.   (*Lesson 7-7*)

25. The original price of a bracelet is $3. The new price is $2.40. Find the percent of decrease.   (*Lesson 9-9*)