

# Unit 6 Lesson 3: Increasing and Decreasing

## 1 Improving Their Game (Warm up)

### Student Task Statement

Here are the scores from 3 different sports teams from their last 2 games.

sports team	total points in game 1	total points in game 2
football team	22	30
basketball team	100	108
baseball team	4	12

1. What do you notice about the teams' scores? What do you wonder?
2. Which team improved the most? Explain your reasoning.

## 2 More Cereal and a Discounted Shirt

### Student Task Statement

1. A cereal box says that now it contains 20% more. Originally, it came with 18.5 ounces of cereal. How much cereal does the box come with now?

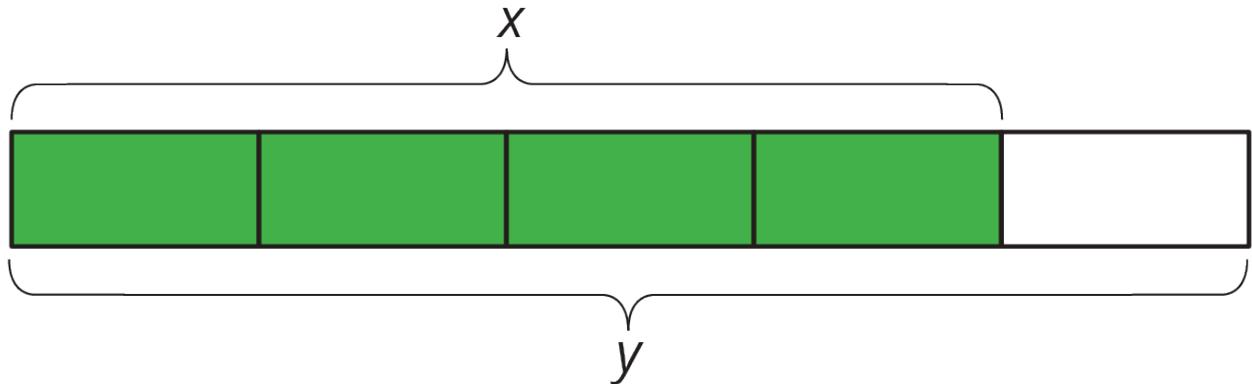


2. The price of a shirt is \$18.50, but you have a coupon that lowers the price by 20%. What is the price of the shirt after using the coupon?



### 3 Using Tape Diagrams

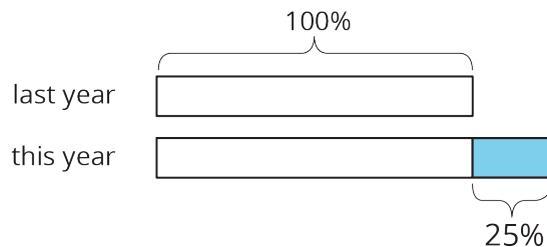
#### Images for Launch



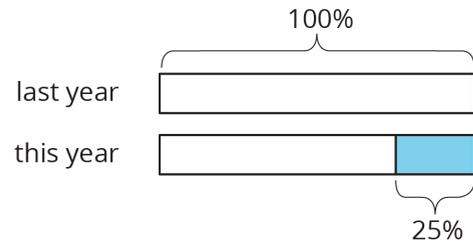
#### Student Task Statement

1. Match each situation to a diagram. Be prepared to explain your reasoning.
  - a. Compared with last year's strawberry harvest, this year's strawberry harvest is a 25% increase.
  - b. This year's blueberry harvest is 75% of last year's.
  - c. Compared with last year, this year's peach harvest decreased 25%.
  - d. This year's plum harvest is 125% of last year's plum harvest.

A



B



2. Draw a diagram to represent these situations.
  - a. The number of ducks living at the pond increased by 40%.
  - b. The number of mosquitoes decreased by 80%.

## 4 Agree or Disagree: Percentages (Optional)

### Student Task Statement

Do you agree or disagree with each statement? Explain your reasoning.

1. Employee A gets a pay raise of 50%. Employee B gets a pay raise of 45%. So Employee A gets the bigger pay raise.
2. Shirts are on sale for 20% off. You buy two of them. As you pay, the cashier says, "20% off of each shirt means 40% off of the total price."