

**Analyzing Changes to NY State Math Tests**  
Grade 6—Ratios and Proportional Relationships Domain

**SAMPLE A—NEW YORK STATE TEST 2010**

6.A.5: Solve simple proportions within context.

**8**

Mary picks 15 flowers from her garden. If 3 out of 5 of these flowers are yellow, how many yellow flowers does Mary pick?

- A** 3
- B** 9
- C** 13
- D** 25

**SAMPLE B—NEW YORK STATE TEST 2012-13 SAMPLE ITEM, MULTIPLE-CHOICE**

6.RP.3b: Solve unit rate problems including those involving unit pricing...

6.RP.2: Understand the concept of a unit rate  $a/b$  associated with a ratio  $a:b$  with  $b \neq 0$ ...

A grocery store sign indicates that bananas are 6 for \$1.50, and a sign by the oranges indicates that they are 5 for \$3.00. Find the total cost of buying 2 bananas and 2 oranges.

- A** \$0.85
- B** \$1.70
- C** \$2.25
- D** \$4.50

**SAMPLE C—NEW YORK STATE TEST 2012-13 SAMPLE ITEM, OPEN-RESPONSE**

6.RP.3c: Find a percent of a quantity as a rate of 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

A clothing store offers a discount of 30% on all items in the store.

**Part A:** If the original price of a sweater is \$40, how much will it cost after the discount? Show your work.

Answer: \_\_\_\_\_

**Part B:** A shopper bought three of the same shirt and paid \$63 with the 30% discount. What was the original price of one of the shirts? Show your work.

Answer: \_\_\_\_\_

**Part C:** Every store employee gets an additional 10% off the already discounted price. If an employee buys an item with an original price of \$40, how much will the employee pay? Show your work.

Answer: \_\_\_\_\_