Grade 6 Post-Test Teacher Scoring Instructions and Answer Key





Note: "Strategy" refers to any method that could lead to the correct answer. Students may use a correct strategy and still get an incorrect answer.

Note: Writing labels is important to stress during instruction. However, for the purpose of this assessment, students do not lose credit when the label is missing.

Objective/Needs	Solutions	
NY-6.RP.3d – Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.		0 dimes in a dollar. Which proportion could be used 5 dollars into dimes?
	B 10/1 = 25/x	ANSWER: A
	C $25/1 = 10/x$	STRATEGIES: Think about the relationship between dimes and dollars. Use the words to set
1-Award 1 point for the correct answer	D 25/x = 1/10	up a ratio for dimes to dollars. Try each answer.
		Dollars = OR Dollars = Dollars
NY-6.RP.3c – Find a percent of a quantity as a rate per 100. Solve problems that involve finding the whole given a part and the percent, and finding a part of a whole given the percent. 2-Award 1 point for both the correct answer and showing a reasonable strategy	ANSWEF STRATEGI used and no	
	Used	Not Used
	1	
	0%	25% 100%

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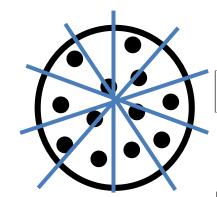
NY-6.RP.3c – Find a percent of a quantity as a rate per 100.

3a-Award 1 point for the fractional part

3b-Award 1 point for the percentage

3b-Award 1 point for explanation

3. Ella and 9 friends shared the pizza pictured below.



3a. What fractional part of the pizza did each of the friends receive?

ANSWER 3a = 1/10

3b. What percent of the pizza did each of the friends receive?

ANSWER 3b = 10%

ANSWER 3c needs to be written in complete sentences and refer to finding both the fraction and the percent.

3c. Explain your strategy for finding the percent.

NY-6.NS.3 – Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

4-Award 1 point for both the correct answer and showing a reasonable strategy

NY-6.RP.1 – Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

5-Award 1 point for both the correct answer and showing a reasonable strategy

4. Mrs. Cantu paid \$90 for a hotel room when she stayed in Helena, MT. If she paid a hotel tax of 7%, how much tax did she pay? Show your work.

ANSWER: \$6.30 tax

STRATEGY: This is a one-step solution.

Multiply to apply the 7% to \$90 and solve for

\$90 x .07 = \$6.3

Need to write final answer in money format as \$6.30

5. Katrina hit home runs an average ratio of 3:5 times at bat. Using that ratio, if she batted 20 times, how many home runs would she be expected to hit? Show your work.

ANSWER: 12 home runs

STRATEGY: Diagram the relationship of home runs to times at bat in the ratio. Write the new ratio with X on the home run side and 20 on the times at bat side. Solve for the equivalent fraction.

 $5 \times 4 = 20$, so $3 \times 4 = X$

$$\frac{\text{Homeruns}}{\text{Times at Bat}} = \frac{3}{5} = \frac{x}{20}$$

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ANSWER: For 1 pound:

STRATEGIES: Diagram the relationship of cost (or dollars) to pounds. Write the ratio using the numbers from the advertisement.

\$0.66 (not rounded) or

\$0.67 (rounded)



NY-6.RP.3b -

Solve unit rate problems. Note: Problems may include unit pricing and constant speed.

6. Mrs. Petra noticed the sign below at the market. How much would she pay for 1 pound of pears at that rate? Show your work.

Today's Special! Pears 6 pounds for \$4



Write the new ratio with **X** for the cost or dollars and 1 for pounds.

Both are correct for this question.

6-Award 1 point for both the correct answer and showing a reasonable strategy

$$\frac{\text{Cost}}{\text{Pounds}} = \frac{\$4}{6} = \frac{x}{1}$$

Multiply across the ratio \$4 x 1 = 6 x X

\$4 = 6X\$4/6 = X

NY-6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals and NY-6.RP.3b - Solve unit rate problems.

7. Margo put \$175 in the bank and left it there for one year. She didn't withdraw or deposit any money in the account. Her bank pays her 5% yearly interest. How much money will she have in her account at the end of the year? Show your strategy.

7a -Award 1 point for the correct answer

7a. ANSWER: \$183.75 at the end of the year

7b–Award 1 point for showing a reasonable strategy

7b. STRATEGIES: Award point for any reasonable strategy, such as: Finding 5% of \$175, then adding to the original \$175 for the year-end total.

Or the student might know that \$175 represents 100%. Adding 100% + 5% to know the year total is 105% of \$175. Convert to decimal and solve for 1.05 x \$175.

NY-6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals and NY-6.RP.3b - Solve unit rate problems.

8. Elliot's lunch bill was \$7.25 including tax. He wants to give the waitress a 15% tip. How much money will he need to pay the bill and leave the tip? Show your work.

8-Award 1 point for **both** the correct answer and for showing a reasonable strategy

ANSWER: \$8.34 to pay both the bill and tip

STRATEGIES: Need to find total cost, not just the tip and convert percents to decimals. Solve for the tip first, then add to the bill for the total. $$7.25 + (.15 \times 7.25)$ OR convert the lunch bill to 100% added to the 15% tip to solve for the total bill. 1.15 x \$7.25