

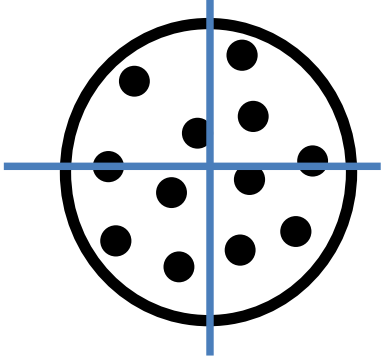



Note: “Strategy” refers to any method that could lead to the correct answer. Students may use a correct strategy and still get an incorrect answer.

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
<p>NY-6.RP.3d – Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p> <p>1-Award 1 point for the correct answer</p>	<p>1. There are 4 quarters in dollar. Which proportion could be used to convert 25 dollars into quarters?</p> <p>A $4/25 = x/25$</p> <p>B $1/4 = x/25$</p> <p>C $25/1 = 4/x$</p> <p>D $4/1 = x/25$</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>ANSWER: D</p> <p>STRATEGIES: Think about the relationship between quarters and dollars. Use the words to set up a ratio for dimes to dollars. Try each answer.</p> <p>$\frac{\text{Dollars}}{\text{Quarters}} = \underline{\hspace{2cm}}$ OR $\frac{\text{Quarters}}{\text{Dollars}} = \underline{\hspace{2cm}}$</p> </div>
<p>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.</p> <p>2-Award 1 point for <i>both</i> the correct answer and showing a reasonable strategy</p>	<p>2. Mr. Sanchez bought a bag of seed. He planted 33% of the seeds from the bag, and he still had 12.5 pounds of seed left to plant. How many pounds of seed were in the full bag? Show your work.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>ANSWER: 66% or 67% (depending on strategy used)</p> <p>STRATEGIES: Draw diagram to portion the "bag" into percents used or not used. Understand that the whole equals 100% so can add up or subtract to find the percent not used. $33\% + x = 100\%$ OR $100\% - 33\% = x$. OR can recognize the equivalence of 33% to $1/3$ and deduce that $2/3$ were not used. The standard percent for $2/3$ equals 66%.</p> </div> <div style="text-align: center; margin-top: 20px;"> <p>The diagram consists of a horizontal rectangle divided into two parts by a vertical dashed line. The left part is labeled "Used" and the right part is labeled "Not used". Below the rectangle is a horizontal line with three tick marks. The first tick mark is at the left end and is labeled "0%". The second tick mark is at the position of the dashed line and is labeled "33%". The third tick mark is at the right end and is labeled "100%".</p> </div>



<p>NY-6.RP.3c – Find a percent of a quantity as a rate per 100.</p> <p>3a-Award 1 point for the fractional part</p> <p>3b-Award 1 point for the percentage</p> <p>3b-Award 1 point for explanation</p>	<p>3. Ella and 3 friends shared the pizza pictured below</p>  <p>3a. What fractional part of the pizza did each of the friends receive?</p> <p>ANSWER 3a = 1/4</p> <p>3b. What percent of the pizza did each of the friends receive?</p> <p>ANSWER 3b = 25%</p> <p>3c. Explain your strategy for finding the percent.</p> <p>ANSWER 3c needs to be written in complete sentences and refer to finding both the fraction and the percent.</p>
<p>NY-6.NS.3 – Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p> <p>4-Award 1 point for both the correct answer and showing a reasonable strategy</p>	<p>4. Mrs. Cantu paid \$200 when she stayed in New York City. If she paid a hotel tax of 15%, how much tax did she pay? Show your work.</p> <p>ANSWER: \$30 tax</p> <p>STRATEGIES: Finding just the tax. Multiply to apply the 15% to \$200, converting the percent to decimal, and solve for \$200 x .15 = \$30</p>
<p>NY-6.RP.1 – Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</p> <p>5-Award 1 point for both the correct answer and showing a reasonable strategy</p>	<p>5. Katrina hit home runs an average ratio of 1:4 times at bat. Using that ratio, if she batted 20 times, how many home runs would she be expected to hit? Show your work.</p> <p>ANSWER: 5 home runs</p> <p>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.</p> <p>$4 \times 5 = 20$, so $1 \times 5 = X$</p> $\frac{\text{Homeruns}}{\text{Times at Bat}} = \frac{1}{4} = \frac{x}{20}$

<p>NY-6.RP.3b – Solve unit rate problems. Note: Problems may include unit pricing and constant speed.</p> <p>6-Award 1 point for both the correct answer and showing a reasonable strategy</p>	<p>6. Mrs. Petra noticed the sign below at the market. How much would she pay for 2 pounds of pears at that rate? Show your work.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">Today's Special! Pears 6 pounds for \$4</p>  </div> $\frac{\text{Cost}}{\text{Pounds}} = \frac{\$4}{6} = \frac{x}{2}$ <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>ANSWER: \$1.33 or \$1.32 for 2 pounds.</p> <p>STRATEGIES: Diagram the relationship of cost (or dollars) to pounds. Write the ratio using the numbers from the advertisement.</p> <p>Write the new ratio with X for the cost or dollars and 1 for pounds.</p> <p>Multiply across the ratio $\\$4 \times 2 = 6 (X)$ $\\$8 = 6X$ $\\$8/6 = X$</p> <p>OR find the unit price first: $\\$4/6 = \\0.66 per pound. Multiply by 2 pounds</p> </div>
<p>NY-6.NS.3 – Fluently add, subtract, multiply, and divide multi-digit decimals and NY-6.RP.3b – Solve unit rate problems.</p> <p>7a -Award 1 point for the correct answer</p> <p>7b–Award 1 point for showing a reasonable strategy</p>	<p>7. Margo put \$225 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 work.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>7a. ANSWER: \$236.25 at the end of the year</p> <p>7b. STRATEGIES: Award point for any reasonable strategy, such as: Finding 5% of \$225, then adding to the original \$225 for the year-end total.</p> <p>Or the student might know that \$1225 represents 100%. Adding 100% + 5% to know the year total is 105% of \$225. Convert to decimal and solve for $1.05 \times \\$225$ for the year end total.</p> </div>
<p>NY-6.NS.3 – Fluently add, subtract, multiply, and divide multi-digit decimals and NY-6.RP.3b – Solve unit rate problems.</p> <p>8-Award 1 point for both the correct answer and for showing a reasonable strategy</p>	<p>8. Elliot's lunch bill was \$9.95 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.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>ANSWER: \$11.44 or \$11.43 to pay both the bill and tip.</p> <p>STRATEGIES: Need to find total cost, not just the tip, then convert percents to decimals. Solve for the tip first, then add to the bill for the total. $\\$9.95 + (.15 \times 9.95) = \\11.44 OR convert the lunch bill to 100% added to the 15% tip to solve for the total bill. $1.15 \times \\$9.95 = \\11.44 OR figure the tip portion by 10% (\$0.99) and 5% (\$0.49). Then add $\\$9.95 + \\$0.99 + \\$0.49 = \\11.43</p> </div>