

Texas Through-year Assessment Pilot (TTAP) Item Samplers – Grade 6 Math

Provided are three sets of examples that demonstrate the difference between the difficulty level classifications within the same standard. The items are categorized as Did Not Meet, Approaches, Meets, or Masters. More information about item difficulty can be found on TTAP Individual Student Reports (ISRs).

Item Sampler Set 1

6.4(B): apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates

Did Not Meet 6.2.4.B	Approaches 6.2.4.B	Meets 6.2.4.B	Masters 6.2.4.B									
<p>A lawn care service mowed 6 lawns in 4 hours. At this rate, how many lawns can the lawn care service mow in 8 hours?</p> <p>A. 10 B. 16 C. 12 D. 18</p>	<p>Sam drives his car for work. The table shows the number of miles that Sam drives based on the number of gallons of gas used.</p> <table><caption>Sam's Car</caption><thead><tr><th>Gas Used (gallons)</th><th>Distance (miles)</th></tr></thead><tbody><tr><td>2</td><td>46</td></tr><tr><td>4</td><td>92</td></tr><tr><td>5</td><td>115</td></tr><tr><td>7</td><td>161</td></tr></tbody></table> <p>A. Sam drives 23 miles per gallon of gas. B. Sam drives 20 miles per gallon of gas. C. Sam needs 5 gallons of gas to drive 230 miles. D. Sam needs 6 gallons of gas to drive 160 miles. E. Sam needs 9 gallons of gas to drive 207 miles.</p> <p>Based on the data in the table, which statements are true? Select TWO correct answers.</p>	Gas Used (gallons)	Distance (miles)	2	46	4	92	5	115	7	161	<p>Jarrett earns \$455 for 35 hours of work.</p> <p>At this rate, how much money in dollars would Jarrett earn for 40 hours of work?</p> <p>Enter your answer in the space provided.</p> <div><div>\$</div><div><div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div>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Gas Used (gallons)	Distance (miles)											
2	46											
4	92											
5	115											
7	161											

Item Sampler Set 2

6.12(D): summarize categorical data with numerical and graphical summaries, including the mode, the percent of values in each category (relative frequency table), and the percent bar graph, and use these summaries to describe the data distribution

Did Not Meet 6.4.12.D	Approaches 6.4.12.D	Meets 6.4.12.D	Masters 6.4.12.D																																
<p>Students at a middle school each enrolled in one elective class. The table shows the number of students who chose each elective class.</p> <p>Elective Class Enrollment</p> <table><tr><th>Class</th><th>Number of Students</th></tr><tr><td>Band</td><td>102</td></tr><tr><td>Robotics</td><td>176</td></tr><tr><td>Theatre</td><td>125</td></tr><tr><td>Art</td><td>97</td></tr></table> <p>Which elective class represents the mode of the data?</p> <p>A. Band B. Robotics C. Theatre D. Art</p> <p>Answer: B</p>	Class	Number of Students	Band	102	Robotics	176	Theatre	125	Art	97	<p>A teacher surveys students on their favorite types of movies. The percent bar graph shows the teacher’s data.</p> <p>What is the mode of the data?</p> <p>Select the section of the percent bar graph the represents the mode of the data.</p> <p>Favorite Movies</p> <p>KEY <input type="checkbox"/> Horror <input type="checkbox"/> Comedy <input type="checkbox"/> Mystery <input type="checkbox"/> Action</p> <p>Answer: 10-50</p>	<p>In a neighborhood, the roof on each house is one of five colors. The table shows the number of roofs of each color in the neighborhood.</p> <p>Roof Colors</p> <table><tr><th>Color</th><th>Number of Roofs</th></tr><tr><td>Black</td><td>5</td></tr><tr><td>Blue</td><td>8</td></tr><tr><td>Gray</td><td>20</td></tr><tr><td>Green</td><td>7</td></tr><tr><td>Tan</td><td>10</td></tr></table> <p>Which statement is best supported by the data in the table?</p> <p>A. More than 50% of the houses have a gray roof. B. Exactly 25% of the house have a tan roof. C. Exactly 7% of the houses have a green roof. D. More than 15% of the houses have a blue roof.</p> <p>Answer: D</p>	Color	Number of Roofs	Black	5	Blue	8	Gray	20	Green	7	Tan	10	<p>A summer camp offered campers a choice of sports to play in the afternoon. The campers’ choices are shown in the table.</p> <p>Sports Choices</p> <table><tr><th>Sport</th><th>Number of Campers</th></tr><tr><td>Basketball</td><td>10</td></tr><tr><td>Soccer</td><td>15</td></tr><tr><td>Tennis</td><td>5</td></tr><tr><td>Volleyball</td><td>10</td></tr></table> <p>Use the data in the table to complete the statements. Choose the correct answer from each drop-down menu to complete the sentences.</p> <p>The sport or pair of sports that represents the mode of the data is</p> <div><p>basketball and volleyball soccer tennis</p></div> <p>The percentage of campers who chose basketball was</p> <div><p>10% 25% 37.5%</p></div> <p>Answer: basketball and volleyball, 25%</p>	Sport	Number of Campers	Basketball	10	Soccer	15	Tennis	5	Volleyball	10
Class	Number of Students																																		
Band	102																																		
Robotics	176																																		
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Sport	Number of Campers																																		
Basketball	10																																		
Soccer	15																																		
Tennis	5																																		
Volleyball	10																																		

Item Sampler Set 3

6.4(G): generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money

Did Not Meet 6.1.4.G	Approaches 6.1.4.G	Meets 6.1.4.G	Masters 6.1.4.G																								
<p>Wesley mowed 45% of his lawn.</p> <p>Which decimal is equivalent to the percentage of his lawn that Wesley has mowed?</p> <p>A. 4.5 B. 45.0 C. 0.45 D. 0.045</p>	<p>Nasir purchased a box of 8 granola bars and ate 6 of them. Which values are equivalent to the portion of the box of granola bars that Nasir ate?</p> <p>Select THREE answers.</p> <p>A. 8/6 B. 3/4 C. 68% D. 75% E. 0.68 F. 0.75</p>	<p>The manager of a store discounted some items:</p> <ul style="list-style-type: none">• Coats were 1/4 off the regular price.• Sweaters were 20% off the regular price. <p>Complete the table to show the equivalent fraction, decimal, and percentage in each row.</p> <p>Move the correct answer to each box in the table. Not all answers will be used</p> <div><div><div><div>1/50</div><div>1/20</div><div>1/5</div><div>0.02</div><div>0.14</div><div>0.2</div><div>0.25</div><div>1.4%</div><div>25%</div></div></div><div><div>Equivalent Values</div><table><tr><th>Fraction</th><th>Decimal</th><th>Percentage</th></tr><tr><td>1/4</td><td></td><td></td></tr><tr><td></td><td></td><td>20%</td></tr></table></div></div>	Fraction	Decimal	Percentage	1/4					20%	<p>A student correctly answers 22 out of 25 questions. What decimal is equivalent to the fraction of questions the student answered correctly.</p> <p>Enter your answer in the space provided.</p> <div><div></div><div><div><div>←</div><div>→</div><div>↶</div><div>↷</div><div>✖</div></div><table><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td></td><td>0</td><td></td></tr><tr><td>.</td><td>-</td><td></td></tr></table></div></div>	1	2	3	4	5	6	7	8	9		0		.	-	
Fraction	Decimal	Percentage																									
1/4																											
		20%																									
1	2	3																									
4	5	6																									
7	8	9																									
	0																										
.	-																										
Answer: C	Answer: B, D, F	Answer: .25, 25%, 1/5, .2	Answer: 0.88																								