Texas Through-year Assessment Pilot (TTAP) Item Samplers – Grade 7 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

7.7(A): represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b

Approaches 7.2.7.A

A car rental company charges an initial fee of $19 plus an additional $0.57 for each mile driven.

Create an equation to find the cost, *y*, to rent a car and drive *x* miles.

Move the correct term to each box. Not all choices will be used.

19 | 19*x* | 0.57 | 0.57*x* | −19*x* | −0.57*x*

$y =$ [ ] + [ ]

Answer: .57x + 19

Meets 7.2.7.A

A bowling alley charges $6.50 per game played and $4.00 for shoe rental. Which table shows the cost, *c*, of renting shoes and playing *g* games of bowling?

Ⓐ **Bowling Cost**

Games, *g*	Cost, *c* (dollars)
1	10.50
3	18.50
5	26.50

Ⓒ **Bowling Cost**

Games, *g*	Cost, *c* (dollars)
1	6.50
3	10.50
5	14.50

Ⓑ **Bowling Cost**

Games, *g*	Cost, *c* (dollars)
1	10.50
3	23.50
5	36.50

Ⓓ **Bowling Cost**

Games, *g*	Cost, *c* (dollars)
1	6.50
3	19.50
5	32.50

Answer: B

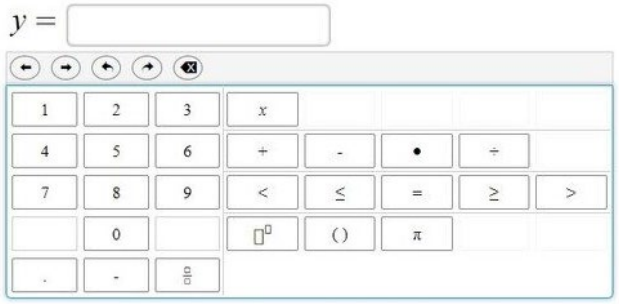
Masters 7.2.7.A

The table shows the relationship between *x* and *y*.

x	*y*
−2	5.8
0	3.4
3	−0.2
7	−5

Complete the equation to represent the relationship between *x* and *y*.

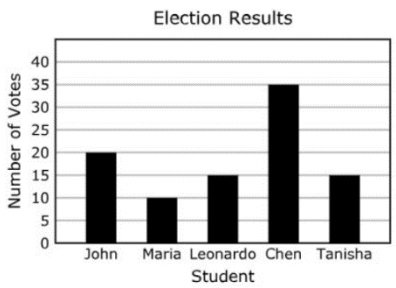
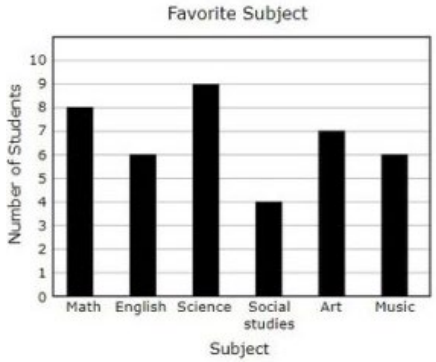
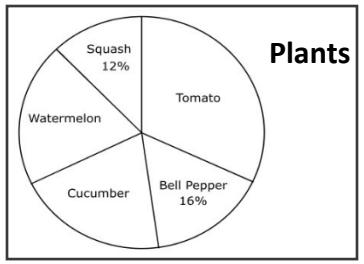
Enter your answer in the space provided.



Answer: 1.2x + 3.4

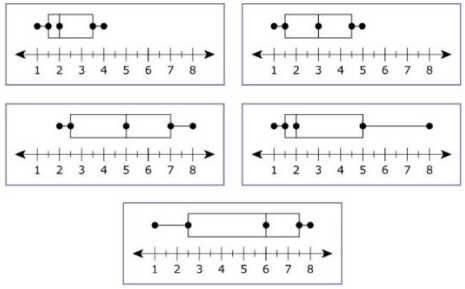
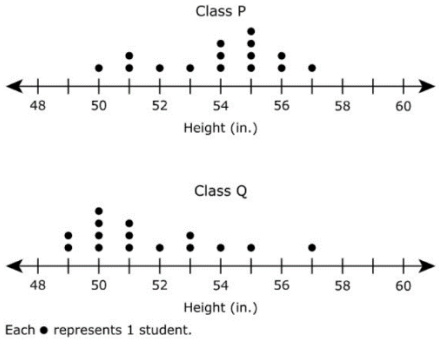
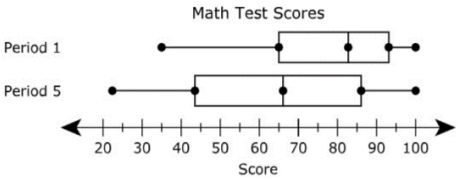
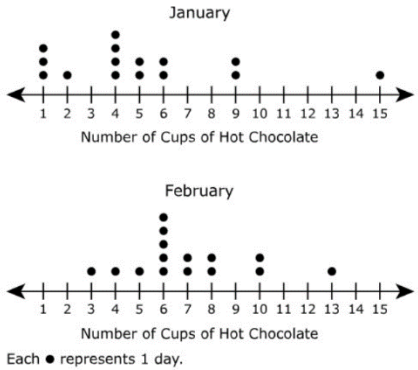
Item Sampler Set 2

7.6(G): solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents

Did Not Meet *7.4.6.G*	*Approaches* *7.4.6.G*	*Meets* *7.4.6.G*	*Masters* *7.4.6.G*
The results of a school election are shown in the bar graph.  Which statement is best supported by the information in the bar graph. A. John had the same number of votes as Maria and Leonardo combined. B. Chen had 10 more votes than Marie and Leonardo combined. C. Tanisha had more votes than John. D. Tanisha and John combined had over 50% of the votes. ***Answer: B***	The dot plot shows the number of hours several students practiced for a talent show.  What percentage of students practiced for 4 or more hours? A. 80% B. 40% C. 20% D. 60% ***Answer: B***	A group of 40 students is surveyed on what their favorite school subjects are. The bar graph shows the results of the survey. What percentage of the students from the survey chose math as their favorite subject?  Enter your answer in the space provided. % ***Answer: 20%***	A garden contains 50 plants. The number of tomato plants is twice the number of bell pepper plants. The number of cucumber plants is the same as the number of watermelon plants. The remainder of the garden consists of squash plants. The circle graph shows the percentages of some of the types of plants in the garden.  Which statements are true? Select **THREE** correct answers. A. The number of tomato plants is 16. B. The total number of cucumber and bell pepper plants is 18. C. Over 50% of the plants are tomatoes and bell peppers. D. Watermelon and cucumber plants combined are 40% of the plants. E. Cucumber plants are 26% of the plants. ***Answer: A, B, D***

Item Sampler Set 3

7.12(A): compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads

Did Not Meet *7.4.12.A*	*Approaches* *7.4.12.A*	*Meets* *7.4.12.A*	*Masters* *7.4.12.A*
Which box plots represent data that have a median that is greater than 4? Select **TWO** correct answers.  ***Answer: 3, 5***	An elementary school coach teaches two volleyball classes. The heights in inches of the students in each of the two classes are graphed in the dot plots shown.  Which statement is supported by the data in the dot plots? A. The maximum for Class P is greater than maximum for Class Q. B. The minimum for Class P is less than minimum for Class Q. C. The median for Class P is greater than the median for Class Q. D. The mode for Class P is less than the mode for class Q. ***Answer: C***	The box plots represent the students' scores on a math test given in two class periods.  Choose the correct answer (less than, equal to, or greater than) from each drop-down menu to complete the statements. The interquartile for Period 1 is ___ the interquartile range for Period 5. The median for Period 1 is ___ the median for Period 5. The maximum test score for Period 1 is ___ the maximum score for Period 5. ***Answer: less than, greater than, equal to***	The dot plots shown represent the number of cups of hot chocolate that Tyler sold each day for two months. Each month he sold hot chocolate on 15 days.  In the table shown, select the month that had a greater mean, median, mode, and range. Select the correct answer in each row. ☐ = checkbox |	January	February
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Mean	☐	☐
Median	☐	☐
Mode	☐	☐
Range	☐	☐	 ***Answer: Feb., Feb., Feb., Jan.***