

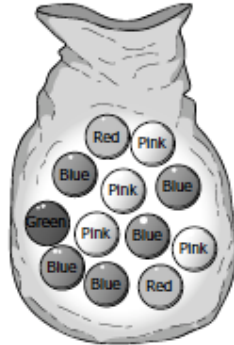
Changes in SOL Item Rigor and Format
Examples for Albemarle County Public School Board
March 8, 2012

Elementary:

Standard: 4.13 The student will a) predict the likelihood of an outcome of a simple event; and b) represent probability as a number between 0 and 1, inclusive.

Previous Test:

34 A pouch contains 5 blue marbles, 2 red marbles, 1 green marble, and 4 pink marbles.



What is the probability that Jorge will select, without looking, a red marble on the first try?

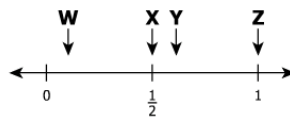
- F $\frac{10}{12}$
- G $\frac{1}{2}$
- H $\frac{2}{10}$
- J $\frac{2}{12}$

New Test

Isaiah has erasers in his pocket.

- There are orange erasers and purple erasers.
- All the erasers are the same size and shape.
- Isaiah is least likely to select a purple eraser when he takes one eraser out of his pocket without looking.

Which letter best represents the probability Isaiah will select a purple eraser?



- A W
- B X
- C Y
- D Z

Middle School:

Standard: 6.14 The student, given a problem situation, will a) construct circle graphs; b) draw conclusions and make predictions, using circle graphs; and c) compare and contrast graphs that present information from the same data set.

Previous Test:

- 32 The first 200 visitors to a state park were asked about their favorite park activity. The results are shown in this circle graph.



Which of the following is *closest* to the number of these 200 visitors who said hiking was their favorite activity?

- F 25 visitors
- G 40 visitors
- H 50 visitors
- J 75 visitors

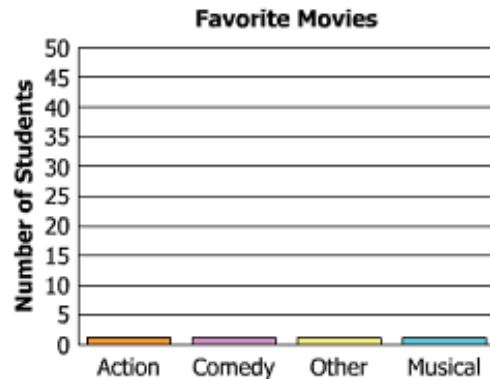
New Test

Cindy surveyed 60 students about their favorite type of movie. This circle graph represents the results of the survey.



Construct a bar graph that could represent the same set of data.

Directions: Click on a location above each bar to show the bar height.

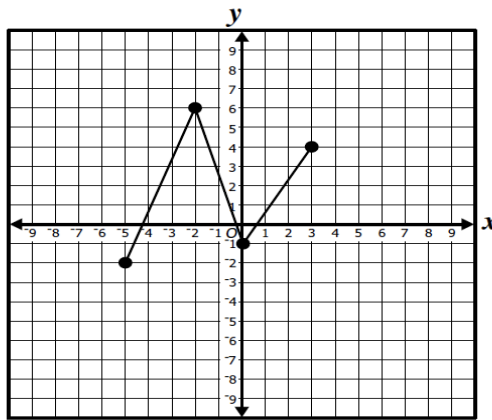


High School Algebra I:

Standard: A.7 The student will investigate and analyze function (linear and quadratic) families and their characteristics both algebraically and graphically, including a) determining whether a relation is a function; b) domain and range; c) zeros of a function; d) x- and y-intercepts; e) finding the values of a function for elements in its domain; and f) making connections between and among multiple representations of functions including concrete, verbal, numeric, graphic, and algebraic.

Previous Test:

37 What is the domain of the function shown?



- A** $-2 \leq x \leq 6$
- B** $-5 \leq x \leq 3$
- C** $-2 \leq y \leq 6$
- D** $-5 \leq y \leq 3$

New Test

Identify each function that has exactly one zero.

$$f(x) = 9x^2 - 4$$

$$g(x) = 9(x - 8)$$

$$h(x) = x^2 + 4x + 8$$

$$j(x) = x^2 - 8x + 16$$

$$k(x) = -2(x + 4)(x + 1)$$

Directions: Click on the box to choose each function you want to select. You must select all correct functions.