

Show your work to the right of the problems below.

- Multiple Choice** If an event has a probability of 0.75, what is the likelihood of it occurring due to chance?  
 (A) Impossible      (B) Unlikely  
 (C) Quite likely      (D) Certain  
 (E) Likely to occur half the time.
- Multiple Choice** A car dealership has 12 cars, 6 trucks, and 7 sport utility vehicles on its lot. What is the probability of randomly choosing a truck?  
 (A)  $\frac{12}{25}$       (B)  $\frac{6}{25}$       (C)  $\frac{7}{25}$   
 (D)  $\frac{6}{19}$       (E)  $\frac{7}{19}$
- Multiple Choice** You randomly choose an integer between 1 and 20. What are the odds that the integer is in the teens?  
 (A)  $\frac{1}{20}$       (B)  $\frac{1}{13}$       (C)  $\frac{7}{13}$   
 (D)  $\frac{7}{20}$       (E)  $\frac{13}{20}$
- Multiple Choice** There are 20 dogs, 14 cats, 6 birds, 1 snake, and 2 rabbits at a local shelter. What are the odds of randomly choosing a cat?  
 (A)  $\frac{7}{10}$       (B)  $\frac{7}{17}$       (C)  $\frac{14}{43}$   
 (D)  $\frac{14}{29}$       (E)  $\frac{1}{29}$
- Multiple Choice** Given that the probability of choosing a King from a deck of cards is  $\frac{1}{13}$ , find the odds.  
 (A)  $\frac{1}{12}$       (B)  $\frac{1}{13}$       (C)  $\frac{4}{52}$   
 (D)  $\frac{1}{14}$       (E)  $\frac{4}{13}$
- Multiple Choice** You toss a coin 16 times. Six of the tosses were tails. What is the experimental probability of tossing a head?  
 (A)  $\frac{3}{8}$       (B)  $\frac{3}{5}$       (C)  $\frac{5}{8}$   
 (D)  $\frac{5}{3}$       (E)  $\frac{1}{2}$

7. **Multiple Choice** A music store did a survey of 100 people to find out what type of music they bought. The survey showed 13 people preferred alternative, 23 blues, 25 hard rock, and 39 soft rock. If they surveyed one more person, what is the experimental probability that the person would prefer alternative?

- (A)  $\frac{1}{87}$       (B)  $\frac{1}{4}$       (C)  $\frac{13}{87}$   
 (D)  $\frac{14}{100}$       (E)  $\frac{13}{100}$

**Quantitative Comparison** In Exercises 8–10, refer to the table and choose the statement that is true about the given number.

- (A) The quantity in column A is greater.  
 (B) The quantity in column B is greater.  
 (C) The two quantities are equal.  
 (D) The relationship can not be determined from the information given.

<i>Students taking Algebra I</i>		
Grade	Female	Male
9th	26	22
10th	21	19
11th	16	23
12th	6	10

	<i>Column A</i>	<i>Column B</i>
8.	The probability of choosing a freshman male student	The probability of choosing a junior or senior female student
9.	The odds of choosing a junior.	The odds of choosing a sophomore.
10.	The probability of choosing a female.	The odds of choosing a female.