

Diagnostic Test

name:

1. Three kinds of apples are mixed up in a basket. How many apples must you draw (without looking) from the basket to be sure of getting two apples of one kind?
2. There are 150 people in a class. If 80% of them are registered, how many are not registered?
3. Express "three-fifths" as a fraction, decimal and percentage.
4. Simplify the following:
$$\frac{x^5 x^2}{x^{-3}}$$
5. If there are 0.82 U.S. dollars in one Canadian dollar, which is smaller: one U.S. dollar or one Canadian dollar?
6. If you drive at an average speed of 65 miles per hour, how long will it take to drive 530 miles?

7. Solve for x the following equation:

$$3x - 5 = 9 + 7x$$

8. Graph the line $5x - 2y = 6$. What is the y -intercept?

9. Suppose that your annual tuition as a freshmen was \$1,856. Each year your tuition increased 5%. Now you are in your senior year. What is your annual tuition this year?

10. Compute the area of the rectangle that has the length of the sides equal to 5 feet and 4 feet.