Algebra 2
Unit: Rational Functions
Section: Direct and Inverse Variation

Section Warm-up: Substitution

Directions: Using the given equations, find the corresponding y-values.

1. Given the equation y equals 5 times x, find y if x is equal to negative 1, 3, 5, and 10.

2. Given the equation y equals 2 divided by x, find y if x is equal to negative 1, negative 2, 2, and 4.

3. What happens if x is equal to zero for the equation y equals 2 divided by x?

Answers:

1. (negative 1, negative 5), (3, 15), (5, 25), (10, 50)

2. (negative 1, negative 2), (negative 2, negative 1), (2, 1), (4, one-half)

3. If x is equal to zero the equation becomes y equals 2 divided by 0. The function is undefined at this x-value because you can't have a zero in the denominator.