

1. What is the definition of a rational number?
2. Every rational number can be written as what kind of decimal?
3. Write the number  $\overline{.222}$  as a fraction.

4. Rationalize the denominator:

$$\frac{5}{3 + \sqrt{2}}$$

5. Solve for  $x$ :

$$\frac{x}{x - 1} = 2$$

6. Solve for  $x$ :

$$x^2 = 4$$

$$x^2 = 9$$

$$x^2 = 5$$

$$(x - 2)^2 = 5$$