

Name _____ Date _____ Period _____

1. Find the fraction equivalent of each of the following numbers in simplest form.

- $0.\overline{7} =$

- $0.\overline{157} =$

2. What is the decimal expansion of the following fraction?

$$\frac{5}{6}$$

3. What is the decimal expansion of the following fraction?

$$\frac{45}{100}$$

4. What is the decimal expansion of the following fraction?

$$\frac{45}{99}$$

5. What is the decimal expansion of the following fraction?

$$\frac{2}{9}$$

6. What is the decimal expansion of the following fraction?

$$\frac{3}{4}$$

7. Classify the real numbers below as rational or irrational numbers.

• $\frac{5}{111}$

• $\frac{e}{6}$

• $\sqrt{23}$

• $\sqrt{81}$

• $\sqrt{36}$

• 15

• $\frac{\sqrt{49}}{7}$

8. Which of the following is an irrational number?

A. $\sqrt{121}$ B. $\sqrt{16}$ C. $\frac{2}{11}$ D. $\sqrt{37}$

9. Which of the following is a rational number?

A. $\sqrt{169}$ B. 5π C. $\sqrt{18}$ D. $\sqrt{91}$

10. What is the fraction for the following decimal expansion?

$0.\overline{73} =$

11. What is the fraction for the following decimal expansion?

$0.\overline{4} =$

12. What is the decimal expansion of the following fraction?

$\frac{13}{99}$