Grade 8 Repeating Decimals as Fractions

Integers • Grade 8 • Mixed Review • Set A • CCSS 8.NS.1

Name: _____ Date: _____

Convert each repeating decimal to a fraction in simplest form, then classify the last three numbers.

1. Write 0.777... as a fraction in simplest form.

   _____

2. Write 0.222... as a fraction in simplest form.

   _____

3. Write 0.454545... as a fraction in simplest form.

   _____

4. Write 0.818181... as a fraction in simplest form.

   _____

5. Write 0.123123... as a fraction in simplest form.

   _____

6. Write 0.555... as a fraction in simplest form.

   _____

7. Write 0.363636... as a fraction in simplest form.

   _____

8. Write 0.666... as a fraction in simplest form.

_____

9. Write 0.111... as a fraction in simplest form.

_____

10. Write 0.272727... as a fraction in simplest form.

_____

11. Write 0.428571428571... as a fraction in simplest form.

_____

12. Write 0.1666... as a fraction in simplest form.

_____

13. Write 0.8333... as a fraction in simplest form.

_____

14. Is $\sqrt{16}$ rational or irrational?

_____

15. Is $\sqrt{10}$ rational or irrational?

_____

16. Is 0.25 rational or irrational?

_____

Answer Key

Grade 8 Repeating Decimals as Fractions — Set A

1. 7/9
2. 2/9
3. 5/11
4. 9/11
5. 41/333
6. 5/9
7. 4/11
8. 2/3
9. 1/9
10. 3/11
11. 3/7
12. 1/6
13. 5/6
14. rational
15. irrational
16. rational