SmartMathz

Converting Recurring Decimals to Fractions

Grade 8 Recurring Decimals Worksheet

Date:_____ Name:_____

LET'S MAKE LEARNING DECIMALS FUN

Convert Recurring Decimals to Fractions

1. $0.\overline{54} =$

2. $0.\overline{63} =$

3. $0.\overline{18} =$

4. $0.\overline{0909} =$

5. $0.\overline{8181} =$

6. $0.\overline{7272} =$

7. $0.\overline{459} =$

8. $0.\overline{090} =$

9. $0.\overline{072} =$

10. $0.\overline{603} =$

11. $0.\overline{882} =$

12. $0.\overline{513} =$

13. $0.\overline{783} =$

14. $0.\overline{153} =$

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Concept Explanation

To solve; $0.\overline{54} = ?$

$$\text{Let} \quad x = 0.54 \tag{1}$$

Multiply both sides by 100

$$100x = 54.54 \tag{2}$$

Subtract: (2) − (1)

$$100x - x = 111.111 - 0.111$$

$$99x = 54$$

Divide both sides by 99

$$x = \frac{6}{11}$$

Answers

1. $\frac{6}{11}$
2. $\frac{7}{11}$
3. $\frac{2}{11}$
4. $\frac{1}{11}$
5. $\frac{9}{11}$
6. $\frac{8}{11}$
7. $\frac{17}{37}$
8. $\frac{10}{111}$
9. $\frac{8}{111}$
10. $\frac{67}{111}$
11. $\frac{98}{111}$
12. $\frac{19}{37}$
13. $\frac{29}{37}$
14. $\frac{17}{111}$