



Converting Recurring Decimals to Fractions

Grade 8 Recurring Decimals Worksheet

Date: _____

Name: _____

LET'S MAKE LEARNING DECIMALS FUN

Convert Recurring Decimals to Fractions

1. $2.\bar{5} =$

8. $8.\bar{5} =$

2. $2.\bar{3} =$

9. $5.\bar{2} =$

3. $4.\bar{8} =$

10. $2.\bar{6} =$

4. $2.\bar{8} =$

11. $7.\bar{8} =$

5. $1.\bar{1} =$

12. $5.\bar{3} =$

6. $7.\bar{2} =$

13. $4.\bar{7} =$

7. $9.\bar{9} =$

14. $3.\bar{3} =$

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Concept Explanation

To solve; $2.\bar{5} = ?$

$$\text{Let } x = 2.5 \quad (1)$$

Multiply both sides by 10

$$10x = 25.5 \quad (2)$$

Subtract: (2) – (1)

$$10x - x = 25.5 - 2.5$$

$$9x = 23$$

Divide both sides by 9

$$x = \frac{23}{9}$$

Answers

1. $\frac{23}{9}$

8. $\frac{77}{9}$

2. $\frac{7}{3}$

9. $\frac{47}{9}$

3. $\frac{44}{9}$

10. $\frac{8}{3}$

4. $\frac{26}{9}$

11. $\frac{71}{9}$

5. $\frac{10}{9}$

12. $\frac{16}{3}$

6. $\frac{65}{9}$

13. $\frac{43}{9}$

7. $\frac{89}{9}$

14. $\frac{10}{3}$