

Expanded Form Quiz: Decimals

Write each number in expanded form using addition only.

1. $1.6 = \frac{1 + 0.6}{\text{OR } 1 + \frac{6}{10}}$

2. $3.9 = \frac{3 + 0.9}{\text{OR } 3 + \frac{9}{10}}$

3. $4.12 = \frac{4 + 0.1 + 0.02}{\text{OR } 4 + \frac{1}{10} + \frac{2}{100}}$

4. $0.73 = \frac{0.7 + 0.03}{\text{OR } \frac{7}{10} + \frac{3}{100}}$

5. $11.58 = \frac{10 + 1 + 0.5 + 0.08}{\text{OR } 10 + 1 + \frac{5}{10} + \frac{8}{100}}$

6. $45.06 = \frac{40 + 5 + 0.06}{\text{OR } 40 + 5 + \frac{6}{100}}$

7. $20.291 = \frac{20 + 0.2 + 0.09 + 0.001}{\text{OR } 20 + \frac{2}{10} + \frac{9}{100} + \frac{1}{1000}}$

8. $107.009 = \frac{100 + 7 + 0.009}{\text{OR } 100 + 7 + \frac{9}{1000}}$

Write each number in expanded form using addition and multiplication.

1. $2.5 = \frac{2 \times 1 + 5 \times 0.1}{\text{OR } 2 \times 1 + 5 \times \frac{1}{10}}$

2. $58.4 = \frac{5 \times 10 + 8 \times 1 + 4 \times 0.1}{\text{OR } 5 \times 10 + 8 \times 1 + 4 \times \frac{1}{10}}$

3. $9.16 = \frac{9 \times 1 + 1 \times 0.1 + 6 \times 0.01}{\text{OR } 9 \times 1 + 1 \times \frac{1}{10} + 6 \times \frac{1}{100}}$

4. $10.88 = \frac{1 \times 10 + 8 \times 0.1 + 8 \times 0.01}{\text{OR } 1 \times 10 + 8 \times \frac{1}{10} + 8 \times \frac{1}{100}}$

5. $76.02 = \frac{7 \times 10 + 6 \times 1 + 2 \times 0.01}{\text{OR } 7 \times 10 + 6 \times 1 + 2 \times \frac{1}{100}}$

6. $0.748 = \frac{7 \times 0.1 + 4 \times 0.01 + 8 \times 0.001}{\text{OR } 7 \times \frac{1}{10} + 4 \times \frac{1}{100} + 8 \times \frac{1}{1000}}$

7. $4.607 = \frac{4 \times 1 + 6 \times 0.1 + 7 \times 0.001}{\text{OR } 4 \times 1 + 6 \times \frac{1}{10} + 7 \times \frac{1}{1000}}$

8. $30.093 = \frac{3 \times 10 + 9 \times 0.01 + 3 \times 0.001}{\text{OR } 3 \times 10 + 9 \times \frac{1}{100} + 3 \times \frac{1}{1000}}$