

Expanded Factors Form With Decimals (H)

Name: _____

Date: _____

Convert each standard form decimal number to expanded factors form using fractions.

1. 1.30530021

2. 1.89957201

3. 2.20263733

4. 9.46504932

5. 5.31885229

6. 8.37987165

7. 8.12450786

8. 8.75897557

9. 5.68911155

10. 4.94997692

Expanded Factors Form With Decimals (H) Answers

Name: _____

Date: _____

Convert each standard form decimal number to expanded factors form using fractions.

1. **1.30530021**

$$(1 \times 1) + (3 \times \frac{1}{10}) + (5 \times \frac{1}{1000}) + (3 \times \frac{1}{10,000}) + (2 \times \frac{1}{10,000,000}) + (1 \times \frac{1}{100,000,000})$$

2. **1.89957201**

$$(1 \times 1) + (8 \times \frac{1}{10}) + (9 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (5 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (2 \times \frac{1}{1,000,000}) + (1 \times \frac{1}{100,000,000})$$

3. **2.20263733**

$$(2 \times 1) + (2 \times \frac{1}{10}) + (2 \times \frac{1}{1000}) + (6 \times \frac{1}{10,000}) + (3 \times \frac{1}{100,000}) + (7 \times \frac{1}{1,000,000}) + (3 \times \frac{1}{10,000,000}) + (3 \times \frac{1}{100,000,000})$$

4. **9.46504932**

$$(9 \times 1) + (4 \times \frac{1}{10}) + (6 \times \frac{1}{100}) + (5 \times \frac{1}{1000}) + (4 \times \frac{1}{100,000}) + (9 \times \frac{1}{1,000,000}) + (3 \times \frac{1}{10,000,000}) + (2 \times \frac{1}{100,000,000})$$

5. **5.31885229**

$$(5 \times 1) + (3 \times \frac{1}{10}) + (1 \times \frac{1}{100}) + (8 \times \frac{1}{1000}) + (8 \times \frac{1}{10,000}) + (5 \times \frac{1}{100,000}) + (2 \times \frac{1}{1,000,000}) + (2 \times \frac{1}{10,000,000}) + (9 \times \frac{1}{100,000,000})$$

6. **8.37987165**

$$(8 \times 1) + (3 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (8 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (1 \times \frac{1}{1,000,000}) + (6 \times \frac{1}{10,000,000}) + (5 \times \frac{1}{100,000,000})$$

7. **8.12450786**

$$(8 \times 1) + (1 \times \frac{1}{10}) + (2 \times \frac{1}{100}) + (4 \times \frac{1}{1000}) + (5 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (8 \times \frac{1}{10,000,000}) + (6 \times \frac{1}{100,000,000})$$

8. **8.75897557**

$$(8 \times 1) + (7 \times \frac{1}{10}) + (5 \times \frac{1}{100}) + (8 \times \frac{1}{1000}) + (9 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (5 \times \frac{1}{1,000,000}) + (5 \times \frac{1}{10,000,000}) + (7 \times \frac{1}{100,000,000})$$

9. **5.68911155**

$$(5 \times 1) + (6 \times \frac{1}{10}) + (8 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (1 \times \frac{1}{10,000}) + (1 \times \frac{1}{100,000}) + (1 \times \frac{1}{1,000,000}) + (5 \times \frac{1}{10,000,000}) + (5 \times \frac{1}{100,000,000})$$

10. **4.94997692**

$$(4 \times 1) + (9 \times \frac{1}{10}) + (4 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (9 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (6 \times \frac{1}{1,000,000}) + (9 \times \frac{1}{10,000,000}) + (2 \times \frac{1}{100,000,000})$$