

Expanded Factors Form With Decimals (B)

Name: _____

Date: _____

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

1. 2.043185008
2. 6.238833262
3. 4.805328194
4. 9.927961719
5. 1.315118863
6. 1.998745339
7. 9.373772716
8. 6.561046064
9. 1.032360551
10. 5.829655842

Expanded Factors Form With Decimals (B) Answers

Name: _____

Date: _____

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

1. **2.043185008**

$$(2 \times 1) + (4 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) + (1 \times \frac{1}{10,000}) + (8 \times \frac{1}{100,000}) + (5 \times \frac{1}{1,000,000}) + (8 \times \frac{1}{1,000,000,000})$$

2. **6.238833262**

$$(6 \times 1) + (2 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (8 \times \frac{1}{1000}) + (8 \times \frac{1}{10,000}) + (3 \times \frac{1}{100,000}) + (3 \times \frac{1}{1,000,000}) + (2 \times \frac{1}{10,000,000}) + (6 \times \frac{1}{100,000,000}) + (2 \times \frac{1}{1,000,000,000})$$

3. **4.805328194**

$$(4 \times 1) + (8 \times \frac{1}{10}) + (5 \times \frac{1}{1000}) + (3 \times \frac{1}{10,000}) + (2 \times \frac{1}{100,000}) + (8 \times \frac{1}{1,000,000}) + (1 \times \frac{1}{10,000,000}) + (9 \times \frac{1}{100,000,000}) + (4 \times \frac{1}{1,000,000,000})$$

4. **9.927961719**

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

5. **1.315118863**

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

6. **1.998745339**

$$(1 \times 1) + (9 \times \frac{1}{10}) + (9 \times \frac{1}{100}) + (8 \times \frac{1}{1000}) + (7 \times \frac{1}{10,000}) + (4 \times \frac{1}{100,000}) + (5 \times \frac{1}{1,000,000}) + (3 \times \frac{1}{10,000,000}) + (3 \times \frac{1}{100,000,000}) + (9 \times \frac{1}{1,000,000,000})$$

7. **9.373772716**

$$(9 \times 1) + (3 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) + (7 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (2 \times \frac{1}{1,000,000}) + (7 \times \frac{1}{10,000,000}) + (1 \times \frac{1}{100,000,000}) + (6 \times \frac{1}{1,000,000,000})$$

8. **6.561046064**

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

9. **1.032360551**

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

10. **5.829655842**

$$(5 \times 1) + (8 \times \frac{1}{10}) + (2 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (6 \times \frac{1}{10,000}) + (5 \times \frac{1}{100,000}) + (5 \times \frac{1}{1,000,000}) + (8 \times \frac{1}{10,000,000}) + (4 \times \frac{1}{100,000,000}) + (2 \times \frac{1}{1,000,000,000})$$