

Expanded Factors Form With Decimals (A)

Name: _____

Date: _____

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

1. 9.408811018
2. 7.331501544
3. 2.193582215
4. 5.519876721
5. 1.241672628
6. 5.833602333
7. 6.100244584
8. 2.061129722
9. 9.055832418
10. 2.073899637

Expanded Factors Form With Decimals (A) Answers

Name: _____

Date: _____

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

1. **9.408811018**

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

2. **7.331501544**

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

3. **2.193582215**

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

4. **5.519876721**

$$(5 \times 1) + (5 \times \frac{1}{10}) + (1 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) + (8 \times \frac{1}{10,000}) + (7 \times \frac{1}{100,000}) + (6 \times \frac{1}{1,000,000}) + (7 \times \frac{1}{10,000,000}) + (2 \times \frac{1}{100,000,000}) + (1 \times \frac{1}{1,000,000,000})$$

5. **1.241672628**

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

6. **5.833602333**

$$(5 \times 1) + (8 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) + (6 \times \frac{1}{10,000}) + (2 \times \frac{1}{1,000,000}) + (3 \times \frac{1}{10,000,000}) + (3 \times \frac{1}{100,000,000}) + (3 \times \frac{1}{1,000,000,000})$$

7. **6.100244584**

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

8. **2.061129722**

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

9. **9.055832418**

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

10. **2.073899637**

$$(2 \times 1) + (7 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) + (8 \times \frac{1}{10,000}) + (9 \times \frac{1}{100,000}) + (9 \times \frac{1}{1,000,000}) + (6 \times \frac{1}{10,000,000}) + (3 \times \frac{1}{100,000,000}) + (7 \times \frac{1}{1,000,000,000})$$