

Expanded Factors Form With Decimals (G)

Name: _____

Date: _____

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

1. 6.706082625
2. 8.264688881
3. 2.594798701
4. 5.086524852
5. 5.865157862
6. 6.337942086
7. 8.491149094
8. 3.828356855
9. 1.653407058
10. 1.179107828

Expanded Factors Form With Decimals (G) Answers

Name: _____

Date: _____

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

1. **6.706082625**

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

2. **8.264688881**

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

3. **2.594798701**

$$(2 \times 1) + (5 \times \frac{1}{10}) + (9 \times \frac{1}{100}) + (4 \times \frac{1}{1000}) + (7 \times \frac{1}{10,000}) + (9 \times \frac{1}{100,000}) + (8 \times \frac{1}{1,000,000}) + (7 \times \frac{1}{10,000,000}) + (1 \times \frac{1}{1,000,000,000})$$

4. **5.086524852**

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

5. **5.865157862**

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

6. **6.337942086**

$$(6 \times 1) + (3 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (7 \times \frac{1}{1000}) + (9 \times \frac{1}{10,000}) + (4 \times \frac{1}{100,000}) + (2 \times \frac{1}{1,000,000}) + (8 \times \frac{1}{10,000,000}) + (6 \times \frac{1}{1,000,000,000})$$

7. **8.491149094**

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

8. **3.828356855**

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

9. **1.653407058**

$$(1 \times 1) + (6 \times \frac{1}{10}) + (5 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) + (4 \times \frac{1}{10,000}) + (7 \times \frac{1}{1,000,000}) + (5 \times \frac{1}{100,000,000}) + (8 \times \frac{1}{1,000,000,000})$$

10. **1.179107828**

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