

Expanded Exponential Form With Decimals (D)

Name: _____

Date: _____

Convert each standard form decimal number to expanded exponential form.

1. 9.623406866
2. 9.249043958
3. 7.650566326
4. 1.105809007
5. 2.769990366
6. 2.763959418
7. 5.073105863
8. 3.531854753
9. 4.775561719
10. 3.195861384

Expanded Exponential Form With Decimals (D) Answers

Name: _____

Date: _____

Convert each standard form decimal number to expanded exponential form.

1. **9.623406866**

$$(9 \times 10^0) + (6 \times 10^{-1}) + (2 \times 10^{-2}) + (3 \times 10^{-3}) + (4 \times 10^{-4}) + (6 \times 10^{-6}) + (8 \times 10^{-7}) + (6 \times 10^{-8}) + (6 \times 10^{-9})$$

2. **9.249043958**

$$(9 \times 10^0) + (2 \times 10^{-1}) + (4 \times 10^{-2}) + (9 \times 10^{-3}) + (4 \times 10^{-5}) + (3 \times 10^{-6}) + (9 \times 10^{-7}) + (5 \times 10^{-8}) + (8 \times 10^{-9})$$

3. **7.650566326**

$$(7 \times 10^0) + (6 \times 10^{-1}) + (5 \times 10^{-2}) + (5 \times 10^{-4}) + (6 \times 10^{-5}) + (6 \times 10^{-6}) + (3 \times 10^{-7}) + (2 \times 10^{-8}) + (6 \times 10^{-9})$$

4. **1.105809007**

$$(1 \times 10^0) + (1 \times 10^{-1}) + (5 \times 10^{-3}) + (8 \times 10^{-4}) + (9 \times 10^{-6}) + (7 \times 10^{-9})$$

5. **2.769990366**

$$(2 \times 10^0) + (7 \times 10^{-1}) + (6 \times 10^{-2}) + (9 \times 10^{-3}) + (9 \times 10^{-4}) + (9 \times 10^{-5}) + (3 \times 10^{-7}) + (6 \times 10^{-8}) + (6 \times 10^{-9})$$

6. **2.763959418**

$$(2 \times 10^0) + (7 \times 10^{-1}) + (6 \times 10^{-2}) + (3 \times 10^{-3}) + (9 \times 10^{-4}) + (5 \times 10^{-5}) + (9 \times 10^{-6}) + (4 \times 10^{-7}) + (1 \times 10^{-8}) + (8 \times 10^{-9})$$

7. **5.073105863**

$$(5 \times 10^0) + (7 \times 10^{-2}) + (3 \times 10^{-3}) + (1 \times 10^{-4}) + (5 \times 10^{-6}) + (8 \times 10^{-7}) + (6 \times 10^{-8}) + (3 \times 10^{-9})$$

8. **3.531854753**

$$(3 \times 10^0) + (5 \times 10^{-1}) + (3 \times 10^{-2}) + (1 \times 10^{-3}) + (8 \times 10^{-4}) + (5 \times 10^{-5}) + (4 \times 10^{-6}) + (7 \times 10^{-7}) + (5 \times 10^{-8}) + (3 \times 10^{-9})$$

9. **4.775561719**

$$(4 \times 10^0) + (7 \times 10^{-1}) + (7 \times 10^{-2}) + (5 \times 10^{-3}) + (5 \times 10^{-4}) + (6 \times 10^{-5}) + (1 \times 10^{-6}) + (7 \times 10^{-7}) + (1 \times 10^{-8}) + (9 \times 10^{-9})$$

10. **3.195861384**

$$(3 \times 10^0) + (1 \times 10^{-1}) + (9 \times 10^{-2}) + (5 \times 10^{-3}) + (8 \times 10^{-4}) + (6 \times 10^{-5}) + (1 \times 10^{-6}) + (3 \times 10^{-7}) + (8 \times 10^{-8}) + (4 \times 10^{-9})$$