

Write decimals in the form $A \times 10^n$

H



1 Write the missing number and power so that these numbers are written in standard form.

a) $0.0004 = \square \times 10^{\square}$

b) $0.7 = \square \times 10^{\square}$

c) $0.000\ 002 = \square \times 10^{\square}$

d) $0.000\ 000\ 000\ 03 = \square \times 10^{\square}$

2 Write these as ordinary numbers.

a) $8 \times 10^{-5} =$ _____

b) $5 \times 10^{-8} =$ _____

c) $6 \times 10^{-3} =$ _____

d) $5 \times 10^{-1} =$ _____

3 Write these numbers in standard form.

a) $0.0009 =$ _____

b) $0.000\ 003 =$ _____

c) five tenths = _____

d) two hundredths = _____

e) $6 \div 100,000 =$ _____

f) $0.000\ 004 \times 100 =$ _____

g) $0.02^3 =$ _____

h) nine billionths = _____

4 What is the same and what is different about each set of numbers?

a) 4×10^{-3} 6×10^{-3} 8×10^{-3}

b) 5×10^{-4} 5×10^{-3} 5×10^{-6}

c) 8×10^3 8×10^{-3}

5 Solve the equations.
Give your answers in standard form.

a) $100g = 9$ $g =$ _____

b) $4 = 10,000b$ $b =$ _____

c) $6 = 2,000p$ $p =$ _____

6 Circle the number that lies between 4×10^{-4} and 3×10^{-4}

0.00038

0.038

0.0038

7 Find the next three terms in the sequence.
Write the terms in standard form.

2×10^{-1} , 0.03, 4×10^{-3} , _____, _____, _____

8 $a = 2b + c$

Find the value of a if $b = 5 \times 10^{-2}$ and $c = 2 \times 10^{-1}$
Write your answer in standard form.

9 A printer's paper tray is 5 cm deep.
One sheet of paper is 8×10^{-3} cm thick.
What is the maximum number of
sheets of paper that can fit in the tray?



10 Five numbers have a median of 9×10^{-2}
The range of the numbers is 0.35
One of the numbers is 0.1
Write the 5 numbers.

Is it possible to find more than one solution?