

Scientific notation

Write the number in scientific notation.

1. $0.0006 = \underline{6 \times 10^{-4}}$

2. $0.043 = \underline{4.3 \times 10^{-2}}$

3. $0.03 = \underline{3 \times 10^{-2}}$

4. $0.09 = \underline{9 \times 10^{-2}}$

5. $0.075 = \underline{7.5 \times 10^{-2}}$

6. $5,700 = \underline{5.7 \times 10^3}$

7. $65,000 = \underline{6.5 \times 10^4}$

8. $3,000 = \underline{3 \times 10^3}$

9. $900,000 = \underline{9 \times 10^5}$

10. $0.00068 = \underline{6.8 \times 10^{-4}}$

11. $0.057 = \underline{5.7 \times 10^{-2}}$

12. $0.008 = \underline{8 \times 10^{-3}}$

Standard form

Write the number in standard form.

1. $9.4 \times 10^4 =$ 94,000

2. $8 \times 10^4 =$ 80,000

3. $6.9 \times 10^4 =$ 69,000

4. $9 \times 10^{-3} =$ 0.009

5. $5.2 \times 10^{-3} =$ 0.0052

6. $8.9 \times 10^{-4} =$ 0.00089

7. $9 \times 10^4 =$ 90,000

8. $8.6 \times 10^{-2} =$ 0.086

9. $9 \times 10^5 =$ 900,000

10. $5.4 \times 10^5 =$ 540,000

11. $2.4 \times 10^{-4} =$ 0.00024

12. $4 \times 10^5 =$ 400,000

Multiply

Multiply. Write the product in scientific notation.

1. $(5 \times 10^2) \times (2 \times 10^{-4}) = \underline{1 \times 10^{-1}}$

2. $(5 \times 10^{-3}) \times (2 \times 10^{-3}) = \underline{1 \times 10^{-5}}$

3. $(3 \times 10^{-4}) \times (2 \times 10^{-4}) = \underline{6 \times 10^{-8}}$

4. $(7 \times 10^{-2}) \times (6 \times 10^{-2}) = \underline{4.2 \times 10^{-3}}$

5. $(4 \times 10^2) \times (2 \times 10^{-4}) = \underline{8 \times 10^{-2}}$

6. $(5 \times 10^{-4}) \times (4 \times 10^{-4}) = \underline{2 \times 10^{-7}}$

7. $(2 \times 10^2) \times (6 \times 10^{-2}) = \underline{1.2 \times 10^1}$

8. $(9 \times 10^{-3}) \times (5 \times 10^1) = \underline{4.5 \times 10^{-1}}$

9. $(3 \times 10^3) \times (2 \times 10^{-2}) = \underline{6 \times 10^1}$

10. $(8 \times 10^4) \times (9 \times 10^1) = \underline{7.2 \times 10^6}$

11. $(8 \times 10^4) \times (2 \times 10^{-2}) = \underline{1.6 \times 10^3}$

12. $(2 \times 10^{-4}) \times (6 \times 10^{-2}) = \underline{1.2 \times 10^{-5}}$

Divide

Divide. Write the quotient in scientific notation.

1. $(4 \times 10^{-3}) \div (4 \times 10^3) = \underline{1 \times 10^{-6}}$

2. $(6 \times 10^{-2}) \div (2 \times 10^{-4}) = \underline{3 \times 10^2}$

3. $(8 \times 10^{-2}) \div (8 \times 10^{-3}) = \underline{1 \times 10^1}$

4. $(3 \times 10^{-3}) \div (5 \times 10^{-3}) = \underline{6 \times 10^{-1}}$

5. $(2 \times 10^{-1}) \div (4 \times 10^{-3}) = \underline{5 \times 10^1}$

6. $(5 \times 10^4) \div (2 \times 10^3) = \underline{2.5 \times 10^1}$

7. $(9 \times 10^4) \div (6 \times 10^2) = \underline{1.5 \times 10^2}$

8. $(2 \times 10^2) \div (2 \times 10^4) = \underline{1 \times 10^{-2}}$

9. $(9 \times 10^{-1}) \div (9 \times 10^{-3}) = \underline{1 \times 10^2}$

10. $(6 \times 10^{-1}) \div (3 \times 10^3) = \underline{2 \times 10^{-4}}$

11. $(3 \times 10^{-3}) \div (6 \times 10^{-3}) = \underline{5 \times 10^{-1}}$

12. $(3 \times 10^3) \div (2 \times 10^{-4}) = \underline{1.5 \times 10^7}$