

Name: \_\_\_\_\_



maths-school.co.uk

1) Convert these numbers into standard form:

a) 500

$5 \times 10^2$

f) 47,000

$4.7 \times 10^4$

b) 800

$8 \times 10^2$

g) 28,000

$2.8 \times 10^4$

c) 15,000

$1.5 \times 10^4$

h) 245,600

$2.456 \times 10^5$

d) 8,800

$8.8 \times 10^3$

i) 401,000

$4.01 \times 10^5$

e) 5,000

$5 \times 10^3$

j) 6,310,000

$6.31 \times 10^6$

2) Convert these numbers into standard form:

a) 0.08

$8 \times 10^{-2}$

f) 0.00007

$7 \times 10^{-5}$

b) 0.005

$5 \times 10^{-3}$

g) 0.000051

$5.1 \times 10^{-5}$

c) 0.24

$2.4 \times 10^{-1}$

h) 0.00042

$4.2 \times 10^{-4}$

d) 0.0034

$3.4 \times 10^{-3}$

i) 0.0000009

$9 \times 10^{-7}$

e) 0.00213

$2.13 \times 10^{-3}$

j) 0.000075

$7.5 \times 10^{-5}$

3) Calculate, leaving your answer in standard form:

a)  $3 \times 10^5 + 5 \times 10^4$

$3.5 \times 10^5$

f)  $(3 \times 10^5) \times (2 \times 10^3)$

$6 \times 10^{15}$

b)  $8 \times 10^6 + 5 \times 10^5$

$8.5 \times 10^6$

g)  $(8 \times 10^6) \div (2 \times 10^3)$

$4 \times 10^3$

c)  $3.4 \times 10^6 + 4.3 \times 10^7$

$4.64 \times 10^7$

h)  $(4.2 \times 10^5) \div (1.4 \times 10^3)$

$3 \times 10^2$

d)  $2.9 \times 10^5 + 3.2 \times 10^4$

$3.22 \times 10^5$

i)  $(2.5 \times 10^5) \times (8 \times 10^4)$

$2 \times 10^{10}$

e)  $6.7 \times 10^4 - 3.4 \times 10^3$

$6.36 \times 10^4$

j)  $(2.5 \times 10^9) \times (1.5 \times 10^4)$

$3.75 \times 10^{13}$

Exam question:

Work out  $\frac{7.2 \times 10^8}{9 \times 10^4}$

Leave your answer in standard form

$8 \times 10^3$

