GCSE HIGHER · REVISION MAT 1

Standard form

1 Write 45 000 in standard form.

2 Write 3.2×10^{-3} as an ordinary number.

3 Explain why 23×10^{5} is not in standard form.

Write it correctly.

4 A grain of sand has a mass of 6×10^{-4} g.

How many grains are in 3 kg of sand?

5 Show that

$(8 \times 10^{5}) \div (2 \times 10^{-3}) = 4 \times 10^{8}$

6 The Sun is 1.5×10^{8} km from Earth.

Light travels at 3×10^{5} km/s.

How long does light take to reach Earth?

7 Show that

$2.4 \times 10^{5} + 6 \times 10^{4} = 3 \times 10^{5}$

8 $A = 4 \times 10^{n}$ and $B = 5 \times 10^{n+2}$

Write AB and $\frac{B}{A}$ in standard form.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Standard form

1 **4.5×10^4**

2 **0.0032**

3 23 is not between 1 and 10.

2.3×10^6

4 3 kg = 3000 g

$3000 \div (6 \times 10^{-4})$

5×10^6 grains

5 $4 \times 10\text{^}(5 - (-3))$

$= 4 \times 10^8$

6 $\frac{1.5 \times 10^8}{3 \times 10^5} = 500$ s

8 minutes 20 seconds

7 $240\,000 + 60\,000 = 300\,000$

$= 3 \times 10^5$

8 $AB = 20 \times 10^{2n+2}$

$AB = 2 \times 10^{2n+3}$

$\frac{B}{A} = 1.25 \times 10^2$

Mr&Mrs MATHS