Standard Form

GCSE Mathematics Questions

Do not use a calculator.

1) Write 3.81×10^{-5} as an ordinary number.

2) Work out $(2.22 \times 10^{7}) \div (6 \times 10^{-4})$ giving your answer in standard form.

3) $a = 6.4 \times 10^{4n+1}$ where n is an integer.

Express $a^{\frac{1}{2}}$ in standard form.

Give your answer in terms of n, as simply as possible.

4) Work out $(3.2 \times 10^{50})^2$ giving your answer in standard form.

5) Given that a is an integer, work out $3.1 \times 10^{a} + 4.2 \times 10^{a+1}$, giving your answer in standard form.

6) $1 \leq b < 10$

$\frac{2.2 \times 10^{a}}{b \times 10^{3}} = 4.4 \times 10^{4}$

a and b are integers.

Find the value of a and the value of b.

Answers