

SMART EXAM RESOURCES

TOPIC : NUMBERS

STANDARD FORM

SET-4-QP-MS

1

$$c = 4 \times 10^7 \qquad d = 5.8 \times 10^6$$

Work out, giving your answers in standard form,

(a) c^2 ,

..... [2]

(b) $c - d$.

..... [2]

MARK SCHEME:

(a)	1.6×10^{15}	2	B1 for equivalent
(b)	3.42×10^7	2	B1 for figs 342

2

(a) Write 7.29784 correct to 3 significant figures.

..... [1]

(b) Write 0.00000306 in standard form.

..... [1]

MARK SCHEME:

(a)	7.30 cao	1	
(b)	3.06×10^{-6} final answer cao	1	

3 (a) Write 375×10^{12} in standard form.

Answer(a) [1]

MARK SCHEME:

(a) 3.75×10^{14} | **1** |

4

Calculate.

$$(3.24 \times 10^{-3}) \div (4 \times 10^4)$$

Give your answer in standard form.

Answer [2]

MARK SCHEME:

8.1×10^{-8}	2	B2	B1 for 0.81×10^{-7}
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5

In standard form, $x = a \times 10^5$ and $y = b \times 10^7$ where $a < b$.

In standard form, $\frac{x}{y} = c \times 10^d$ where $1 \leq c < 10$.

(a) Find the value of d .

Answer(a) [1]

(b) Find c in terms of a and b .

Answer(b) $c =$ [2]

MARK SCHEME:

(a)	-3	1	
(b)	$\frac{10a}{b}$	2	M1 for $\frac{a}{b} \times 10^{-2}$ seen