

**SMART EXAM RESOURCES**  
**STAGE 9 MATHEMATICS**  
**TOPIC QUESTIONS TOPIC:**  
**STANDARD FORM**  
**SET-1**

1.

Calculate  $1.827 \times 10^6 \div 9000$ .  
Give your answer in standard form.

..... [2]

MARK SCHEME:

$2.03 \times 10^2$ cao	<b>2</b>	<b>B1</b> for 203 oe If 0 scored, <b>SC1</b> for writing <i>their</i> ordinary number correctly in standard form
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2.

(a) Write these numbers in standard form.

(i) 45 000

..... [1]

(ii) 0.0063

..... [1]

(b) Calculate  $8.2 \times 10^{-1} \times 150\,000$ .  
Give your answer in standard form.

..... [2]

MARK SCHEME 2:

(a)(i)	$4.5 \times 10^4$ cao	<b>1</b>	
(a)(ii)	$6.3 \times 10^{-3}$ cao	<b>1</b>	
1(b)	$1.23 \times 10^5$ cao	<b>2</b>	<b>B1</b> for 123 000 oe seen

3.

Calculate  $1 \div (6.4 \times 10^{-5})$ .  
Give your answer in standard form.

..... [2]

MARK SCHEME 3:

$1.5625 \times 10^4$	<b>2</b>	<b>B1</b> for $1.56 \times 10^4$ or $1.562 \times 10^4$ or $1.563 \times 10^4$ or figs 15625
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4.

(a) Write 0.00273 in standard form.

..... [1]

(b) Sam has to answer this question.

Calculate $9306 \times 4532$ . Give your answer in standard form correct to 3 significant figures.
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Sam writes  $42.1 \times 10^6$  as his answer to this question.

What two errors has Sam made?

Error 1 .....

Error 2 .....

[2]

MARK SCHEME 4:

a)	$2.73 \times 10^{-3}$ cao	<b>1</b>	
b)	42.1 is incorrectly rounded [to 3 significant figures] oe 42.1 $\times 10^6$ is not correct standard form oe	<b>2</b>	<b>B1</b> for each If <b>B0</b> scored, <b>SC1</b> for $4.22 \times 10^7$ seen

5.

Write 53 400 000 in standard form.

*Answer* ..... [1]

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MARK SCHEME:

$5.34 \times 10^7$	<b>1</b>	
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