

**SMART EXAM RESOURCES**  
**0580 EXTENDED MATH**  
**TOPIC: NUMBERS**  
**SUB-TOPIC: SIGNIFICANT FIGURES**  
**SET-3-QP-MS**

**1** Write the following numbers correct to one significant figure.

**(a)** 7682

*Answer(a)* ..... [1]

**(b)** 0.07682

*Answer(b)* ..... [1]

**MARK SCHEME:**

<b>(a)</b> 8000 cao	<b>1</b>	
<b>(b)</b> 0.08 cao	<b>1</b>	

2 Find the value of  $\frac{7.2}{11.8 - 10.95}$ .

Give your answer correct to 4 significant figures.

Answer ..... [2]

**MARK SCHEME:**

8.471 cao	2	<b>B1</b> for 8.47 or 8.4705 to 8.4706 or $\frac{144}{17}$ or $8\frac{8}{17}$
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3

By writing each number correct to 1 significant figure, estimate the value of  $\frac{\sqrt{3.9} \times 29.3}{8.9 - 2.7}$ .

Show all your working.

Answer ..... [2]

**MARK SCHEME:**

$\frac{\sqrt{4} \times 30}{9 - 3}$ 10 nfw	<b>M1</b> <b>A1</b>	Allow one error and 2 for $\sqrt{4}$ and 6 for $9 - 3$
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4 Write 168.9 correct to 2 significant figures.

Answer ..... [1]

**MARK SCHEME:**

170 cao	1	
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**5** Write 0.040 1907 correct to

(a) 3 significant figures,

.....[1]

(b) 3 decimal places.

.....[1]

**MARK SCHEME:**

<b>(a)</b>	[0].0402	<b>1</b>	
<b>(b)</b>	[0].040	<b>1</b>	

.....[2]

6

(a) Use a calculator to work out  $\frac{5^{0.4} - \sqrt{3}}{0.13 - 0.015}$ .

Write down all the digits in your calculator display.

..... [1]

Write your answer correct to 2 significant figures

..... [1]

**MARK SCHEME:**

(a)	1.49220....	<b>1</b>	
(b)	1.5	<b>1FT</b>	<b>FT</b> <i>their</i> answer to (a) rounded correctly to 2 significant figures

7 Write these numbers correct to 2 significant figures.

(a) 0.076499

..... [1]

(b) 10 100

..... [1]

**MARK SCHEME:**

(a)	0.076 cao	<b>1</b>	
(b)	10000 cao	<b>1</b>	

8 Calculate.

$$\frac{16.379 - 0.879}{4.2} \times 1.241$$

Give your answer correct to 2 significant figures.

..... [2]

**MARK SCHEME:**

4.6 cao nfw	2	<b>B1</b> for 4.57 or 4.58 or 4.579 to 4.580 If 0 scored, <b>SC1</b> for their calculation rounded to 2 sf if more than 2sf seen
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