

Teacher Guidance:

Using this resource:

This resource aims to improve calculator skills in exam-style questions for students in Key Stage 3/ GCSE Foundation classes. The revision mat can be projected on the board, or printable versions are available.

Printable documents have been resized so that two worksheets (1 per student) are printed on each page.

Calculator Guidance:

Question **d** requires students to change an output so that it is written as a product of its prime factors.

- After entering the number, press **SHIFT-FORMAT**  > Prime Factor **③**

Question **h** requires students to use the % button in the catalogue.

- Find this by pressing **CATALOG**  > Probability **②** > % **①**

Question **j** requires students to use the lowest common multiple function in the catalogue.

- Find this by pressing **CATALOG**  > Numeric Calc **③** > LCM **②**

Question **m** uses the Statistics app **②**, found in **HOME** .

- After selecting 1-Variable, students can enter the data in the table and 1-Var results will produce statistics, including the mean.

Going Deeper:

These questions extend students' calculator skills by probing them to think about how changes to the input may affect the correct answer and what GCSE questions might match the input. Students should draw on ideas about negative numbers and BIDMAS, and how inputs are interpreted by calculators.

Going deeper questions are available on the PowerPoint version of this resource.

Answer the questions, using your calculator where appropriate.

a)	b)	c)	d)										
$\frac{(3.54 \times 10^4)}{(1.6 \times 10^{-2})}$ in standard form	$2\frac{1}{3} + (-0.2)^2$ to 3 sig fig	$\frac{\sqrt{600}}{2 \times 3}$ i) exactly ii) to 2 d.p.	8450 as a product of prime factors										
e)	f)	g)	h)										
0.8 hours as hours/minutes/seconds	$\sqrt{2.4^2 + 5.8^2}$ to 2 d.p.	$0.\dot{3}2$ as a fraction	16% of 721 to 1 d.p.										
i)	j)	k)	l)										
$\sqrt[4]{4096}$	The lowest common multiple of 72 and 63	$\frac{1}{3}\pi \times 3^2 \times 7$ i) n terms of π ii) to 4 sig fig	4 hours 12 minutes and 36 seconds as a decimal										
m)		n)											
Find the mean score to 2 d.p.		$\frac{\sqrt{6}}{2} \times \frac{\pi \times 0.3}{0.5^2}$ as the whole decimal value											
<table><tr><td>Score</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>Frequency</td><td>13</td><td>32</td><td>25</td><td>9</td></tr></table>		Score	1	2	3	4	Frequency	13	32	25	9		
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Answer the questions, using your calculator where appropriate.

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