Calculate fractions, decimals and percentages of an amount using calculator methods

Rosie and Amir are using a calculator to find $17 \%$ of 9,000 Here's what they typed into their calculators.


Use your calculator to check with a partner that both methods give the same answer.

Which method do you prefer?
2) Use a calculator to work out the percentages.
a) $43 \%$ of $4,000=$ $\square$
d) $30 \%$ of $820=$ $\square$
b) $26 \%$ of $£ 3,000=$ $\square$
e) $35 \%$ of $820=$ $\square$
c) $92 \%$ of $680 \mathrm{~kg}=$ $\square$
f) $35.2 \%$ of $820=$ $\square$

Complete the table.

| Question | Estimate | Calculation and answer |
| :---: | :---: | :--- |
| $53 \%$ of 870 | $50 \%$ of $900=900 \div 2=\square$ | $0.53 \times 870=\square$ |
| $88 \%$ of 302 |  |  |
| $33 \%$ of 880 |  |  |

(4) Whitney, Teddy and Annie are using their calculators to find $\frac{4}{7}$ of 980 Here's what they typed in their calculators.


Use your calculator to check with a partner that all three methods give the same answer.
Whose method do you prefer? $\qquad$
Why?
$\qquad$

5 Use a calculator to work out the fractions.
a) $\frac{3}{5}$ of $850=$ $\square$
d) $\frac{5}{4}$ of $764=$ $\square$
b) $\frac{7}{8}$ of $12,000=$ $\square$
e) $\frac{11}{25}$ of $1,650=$ $\square$
c) $\frac{2}{3}$ of $513=$ $\square$
f) $\frac{25}{11}$ of $6,743=$ $\square$Nijah works out $23 \%$ of $£ 120$ on her calculator. She writes $£ 27.6$ Her teacher marks the answer wrong. Why?
a) Round the numbers to one significant figure.

b) Complete the table

| Question | Estimate | Calculation and answer |
| :---: | :---: | :---: |
| $23 \% \times 6,305$ |  |  |
| $0.235 \times 6,350$ |  |  |
| $37.6 \%$ of 41 |  |  |
| $0.088 \times 909$ |  |  |

c) Dora and Mo are estimating 68\% of 900


Explain why both methods will give a good estimate of $68 \%$ of 900
$\qquad$

Will their estimates be greater or smaller than the actual answer?

|  | greater | smaller |
| :--- | :---: | :---: |
| Dora's estimate | $\square$ | $\square$ |
| Mo's estimate | $\square$ | $\square$ |

a) Write the percentages as decimals

b) Mr Hall invests $£ 3,500$ in a bank account.

After one year, the bank pays him 1.3\% interest on his investment. Work out how much interest Mr Hall receives.
c) Miss Lee gets a loan of $£ 5,000$ from a bank.

At the end of the year, she is charged $2.75 \%$ interest on her loan.
How much does she now owe the bank altogether?
$\square$

Write $>,<$ or $=$ to complete the statements.
a)
$63 \%$ of 12,000
 $0.17 \times 58,000$
b) $3.8 \%$ of 2 million $\bigcirc \frac{5}{8}$ of 90,000
c) $85 \%$ of 70 million
 $0.8 \%$ of 7 billion
d)
 $0.43 \times 150,000$
e) $5 \%$ of $3,000^{2} \bigcirc \frac{9}{20}$ of 1 million

