

1 When rounded to 3 significant figures, $x = 6.37$

Circle the correct error interval.

[1 mark]

$6.365 \leq x < 6.375$

$6.36 \leq x < 6.38$

$6.369 \leq x < 6.379$

$6.365 \leq x < 6.3749$

2 Millie is estimating the value of $\frac{1}{(\sqrt[3]{8.34})^2 \times 10.21}$

She rounds each decimal number to 1 significant figure.

2 (a) Work out Millie's estimate.

You **must** show your working.

$$\frac{1}{(\sqrt[3]{8})^2 \times 10} = \frac{1}{2^2 \times 10} = \frac{1}{40}$$

[2 marks]

Answer $\frac{1}{40}$

2 (b) Millie says,

"My estimate must be more than the exact value."

Without working out the exact value, give a reason how she can know this.

[1 mark]

Both numbers are rounded down.