1   Use approximations to estimate the answer to $\dfrac{\sqrt{97} + 2.014^3}{0.49}$

[3 marks]

Answer _____

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

She rounds each decimal number to 1 significant figure.

2 (a) Work out Millie's estimate.

You **must** show your working.

[2 marks]

Answer _____

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]

3 (a)   Here are two calculations, A and B.

A
$1.92^7 + 6.9^3$

B
$5 \times \sqrt[3]{1\,000\,350}$

Use approximations to show that   answer to A $<$ answer to B

[3 marks]