1 $a = 4.72$ to 3 significant figures.

$b = 158$ to 3 significant figures.

Work out the upper bound of $\frac{a}{b}$

You **must** show your working.

[3 marks]

Answer _____

2 To be rented, a bedroom must have a floor area of at least 6.51 m^2

A bedroom has a rectangular floor.

The floor measures 2.4 m by 2.9 m, each correct to 2 significant figures.

Show that the bedroom can be rented.

[3 marks]

3 The mass of a baby is 3.6 kilograms to 1 decimal place.

What is the error interval for the mass in kilograms?

Tick **one** box.

[1 mark]

- ☐ $3.5 \leqslant \text{mass} \leqslant 3.6$
- ☐ $3.55 \leqslant \text{mass} \leqslant 3.65$
- ☐ $3.5 \leqslant \text{mass} < 3.6$
- ☐ $3.55 \leqslant \text{mass} < 3.65$

4 a = 65 to the nearest integer

b = 30 to 1 significant figure

Work out the **upper bound** for $2a^2 - b^2$

You **must** show your working.

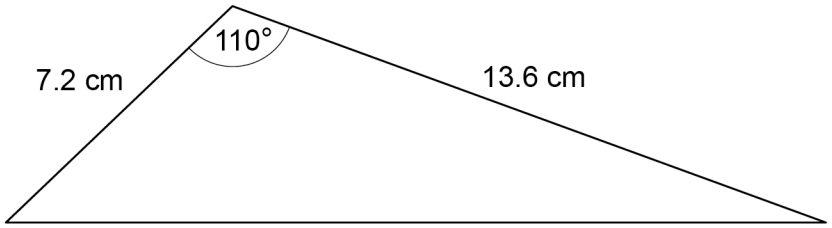
[3 marks]

Answer _____

5 Two sides of a triangle are measured to 1 decimal place.

The angle between the sides is measured to the nearest degree.

Not drawn accurately



Work out the upper bound for the area of the triangle.

You **must** show your working.

[4 marks]

Answer _____ cm^2