

Name: _____
YEAR 11 MINI-ASSESSMENT 13
HIGHER – ESTIMATION

1. (a) An angle, A is measured as 80° to the nearest degree.
Complete this statement to show the range of possible values for A.

$$\text{_____} \leq A < \text{_____}$$

(2)

- (b) **Estimate** the value of the calculation $\frac{561 \times 19.73^2}{3.75 \times 0.00183}$

(3)

[5 marks]

2. A lorry is 3.8m high to the nearest 0.1m
It is driven under a bridge 4.28m tall to the nearest cm.
As the lorry drives under it, what is the smallest possible gap between the
bridge and the lorry?

[4 marks]

3.

$$m = \sqrt{\frac{p}{qr}}$$

p = 17.2 correct to 1 decimal place
q = 1.92 correct to 3 significant figures
r = 5.0 correct to 2 significant figures.

By considering the bounds of accuracy form, calculate m to an appropriate
degree of accuracy. Explain your reasoning.

[5 marks]