Practice worksheet | Surface area, volume and measurement

Absolute, relative and percentage error

Name: _____ Date: _____

6 questions | 15 marks

1. A measurement is 78 m and the accepted length is 80 m. Find its absolute, relative and percentage error. [3 marks]

2. A 20 g reference is measured as 20.4 g. Find the percentage error. [2 marks]

3. A 250 L tank capacity is estimated as 240 L. Find the absolute and percentage errors. [2 marks]

4. A ruler reading is rounded to the nearest 0.1 cm. State the greatest possible rounding error. [2 marks]

5. A length is recorded as 6.2 m to the nearest 0.1 m. Give the interval of values that round to this reading. [3 marks]

6. A 100 cm reference is measured as 98 cm. A 50 cm reference is measured as 49 cm. Which has the smaller percentage error? [3 marks]