Practice worksheet | Measurement and scale

Measurement error

Name: _____ Date: _____

6 questions | 14 marks

1. A length is 8 cm to the nearest centimetre. Give bounds. [2 marks]

2. A mass is 2.30 kg to the nearest 0.01 kg. Give maximum absolute rounding error. [2 marks]

3. A 40 m reported distance has absolute error 0.2 m. Use 40 m as reference to find percentage error. [2 marks]

4. A rectangle is 6 by 4 cm, each to the nearest centimetre. Find lower and upper area limits. [3 marks]

5. Compare 100 g with error 2 g and 500 g with error 5 g. Which has smaller relative error using the readings as reference? [3 marks]

6. A 12.0 s reading is to the nearest 0.1 s. Can its true value be 12.06 s? Explain. [2 marks]