

## Practice Exercises for Chapter 15 – Accuracy and Estimation

### Set A

#### Accuracy

1. What is the largest possible true value of these numbers:
  - a. 0.14
  - b. 18.00
  - c. 42 000 (3sf)
  - d. 12
  - e. 0.500
2. What is the smallest possible true value of these numbers:
  - a. 2.44
  - b. 0.0150
  - c. 205
  - d. 3.00
  - e. 2 500 (3sf)

#### Rounding

3. Round these numbers to the given degree of accuracy:
  - a. 0.3327 to 2dp
  - b. 2.445 to 1dp
  - c. 0.0037189 to 3dp
  - d. 0.0037189 to 3sf
  - e. 0.0037189 to 2dp
4. Round these numbers to 3sf:
  - a. 23 422
  - b. 3.4005
  - c. 0.0028527
  - d. 24 288 364
  - e. 2 500

#### Estimation

5. Estimate an answer to these arithmetic questions by rounding to 1sf before calculating an answer:
  - a.  $5.7 \times 2.2$
  - b.  $73.3 \div 9.8$
  - c.  $2\,300 \times 48.2$
  - d.  $0.0337 \times 0.044$
  - e.  $1 \div 0.548$
  - f.  $0.0284 \times 245$
  - g.  $45\,629 \times 3\,340$
  - h.  $4.707 \div 1.04$
  - i.  $330 \times 9.8$
  - j.  $23 \div 0.16$
6. Estimate an answer to  $5.02 + 5.00 + 5.01 + 4.98 + 5.00 + 4.99 + 4.99 + 5.02 + 4.99 + 5.00$