

Answers to Practice Exercises for Chapter 15 – Accuracy and Estimation

Set A - Question 4

- a. 23 422 to 3sf is between 23 400 and 23 500. The remaining digits, 22, make it closer to 23 400.
- b. 3.4005 to 3sf is between 3.40 and 3.41. The remaining digits, 05, make it closer to 3.40.
- c. 0.002 852 7 to 3sf is between 0.002 85 and 0.002 86. The remaining digits, 27, make it closer to 0.002 85.
- d. 24 288 364 to 3sf is between 24 200 000 and 24 300 000. The remaining digits, 88 364, make it closer to 24 300 000.
- e. 2500 has two trailing zeroes. At present there is no way of telling if the accuracy is 2, 3 or 4 significant figures. The only thing you can do is give it 3sf status: 2500 (3sf).