

02 - Numbers

Numerical Reasoning Test Preparation Question Pack

This document is part of a set of resources designed to help people prepare for numerical reasoning tests. However, they could also be used by anyone who wants to improve their maths skills, especially how to use a calculator to work with fractions, percentages, ratios and averages.

There are six topic areas covered in these documents (Calculator Skills; Numbers; Fractions; Percentages; Ratio and Proportion; and Averages). For each topic area there are two documents: one is a set of notes and worked examples, and the other is a question pack.

Each set of notes and each question pack is divided up into a number of skills. For each skill, read through the notes and examples and then try the questions for that skill from the question pack. I advise that you work through the skills in order, only moving onto the next one once you have mastered the current one (this is called *mastery learning*).

Questions

You may use a calculator.

The answers can be found at the end of this document.

Round a given number to a given number of decimal places.

- 1) Round 325.875 to 2 dp.
- 2) What is 65.496 to 1 dp?
- 3) Round 54.2653 to 3 dp.
- 4) What is 34.97 to 1 dp?
- 5) What is 453.996 to 2dp?

Round a given number to a given number of significant figures.

- 1) What is 67.8732 to 3 sf?
- 2) 0.0004502 to 3 sf?
- 3) What is 34,565 to 2 sf?

- 4) What is 5.00625 to 3 sf?
- 5) What is 0.00040997883 to 3 sf?

Calculate the difference between two numbers.

- 1) What is the difference between 34,556 and 29,873?
- 2) What is the difference between 1093.276 and 1644.78?
- 3) Calculate the difference between 65.3 and -108.7.
- 4) What is the difference between -99.99 and 0.01?
- 5) What is the difference between -2503 and -1476?

Given the amount of some resource available, and the amount of resource needed to obtain one item, find the number of items that can be obtained.

- 1) A first class stamp costs 85p. Alex has £5.68. How many first class stamps can she buy?
- 2) A teacher is making revision booklets for their students. Each revision booklet uses 13 sheets of paper. If the teacher has 1200 sheets of paper, how many revision booklets can they make?
- 3) Brian is riding his bike. He is cycling laps of a route which starts and ends at his house. Each lap takes him 17 minutes. He has an hour and ten minutes available to cycle. What is the maximum number of laps he can cycle and end up back at his house?
- 4) A hospital ward wants to hire more nurses. Each of the new nurses will have a salary of £24,907. If £70,000 of the ward's annual budget has been allocated to paying the new nurses, how many new nurses can it hire?
- 5) A game requires teams of exactly 4 players. There is no limit to how many teams can play. A group of 30 friends want to play the game. How many teams can they have?

Answers

Round a given number to a given number of decimal places.

1. 325.88
2. 65.5
3. 54.265
4. 35.0
5. 454.00

Round a given number to a given number of significant figures.

1. 67.9
2. 0.000450
3. 35,000
4. 5.01
5. 0.000410

Calculate the difference between two numbers.

1. 4683
2. 551.504
3. 174
4. 100
5. 1027

Given the amount of some resource available, and the amount of resource needed to obtain one item, find the number of items that can be obtained.

1.

6

2.

92

3.

4

4.

2

5.

7