JRA Tutors
Private tuition and small online Study Pods

Estimating

Grade 3 topic · Foundation and Higher · Edexcel and AQA

How to use this pack
20 questions that get harder as you go. Foundation students: aim for Questions 1–15 (35 marks) and have a go at the rest. Higher students: complete all 20. Show your working on the lines and write your final answer on the answer line, then mark yourself with the answers at the back. Diagrams are not drawn accurately. Total: 55 marks.

Warm-up

1 Estimate the value of 28 + 98 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

2 Estimate the value of 59 + 84 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

3 Estimate the value of 22 + 43 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

4 Estimate the value of 50 + 98 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

5 Estimate the value of 48 + 93 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

Core

6 Estimate the value of 82 × 59 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

7 Estimate the value of 61 × 77 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

8 Estimate the value of 72 × 33 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

9 Estimate the value of 57 × 38 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

10 Estimate the value of 75 × 94 by rounding each number to 1 significant figure. **[2 marks]**

Answer _____

Stretch

11 Estimate the value of (52 × 2.3) ÷ 0.23 by rounding each number to 1 significant figure. **[3 marks]**

Answer _____

12 Estimate the value of (43 × 5.1) ÷ 0.39 by rounding each number to 1 significant figure. **[3 marks]**

Answer _____

13 Estimate the value of (68 × 4) ÷ 0.53 by rounding each number to 1 significant figure. **[3 marks]**

Answer _____

14 Estimate the value of $(83 \times 2.3) \div 0.18$ by rounding each number to 1 significant figure. **[3 marks]**

Answer _____

15 Estimate the value of $(90 \times 3.9) \div 0.22$ by rounding each number to 1 significant figure. **[3 marks]**

Answer _____

Challenge

16 Estimate the value of $66^2 \div 2.9$. Round each number to 1 significant figure, and say whether your answer is an over- or under-estimate. **[4 marks]**

Answer _____

17 By rounding to the nearest square number, estimate √48. Is your estimate an overestimate or an underestimate? Explain. **[4 marks]**

Answer _____

18 Estimate the value of $70^2 \div 7.3$. Round each number to 1 significant figure, and say whether your answer is an over- or under-estimate. **[4 marks]**

Answer _____

19 By rounding to the nearest square number, estimate √67. Is your estimate an overestimate or an underestimate? Explain. **[4 marks]**

Answer _____

20 Estimate the value of $75^2 \div 3.5$. Round each number to 1 significant figure, and say whether your answer is an over- or under-estimate. **[4 marks]**

Answer _____