Educational Worksheet

Answer Key: Add and Subtract Decimals

Grade 7 Mathematics - Medium Difficulty
Total Marks: 40

Section A: Basic Addition and Subtraction

1. 23.4 + 15.7 = **39.1**

2. 67.89 + 23.4 = **91.29**

3. 156.7 - 89.3 = **67.4**

4. 45.67 - 28.9 = **16.77**

5. 123.456 + 67.89 = **191.346**

6. 234.5 - 167.89 = **66.61**

7. 89.7 + 123.45 + 67.8 = **280.95**

8. 456.78 - 289.456 = **167.324**

9. 12.345 + 67.8 + 123.45 = **203.595**

10. 789.4 - 456.789 = **332.611**

Section B: Mixed Operations

11. 45.6 + 23.78 - 12.9 = **56.48**

12. 123.4 - 67.89 + 45.6 = **101.11**

13. 234.56 + 78.9 - 156.78 = **156.68**

14. 67.8 - 23.456 + 89.7 = **134.044**

15. 345.67 + 123.4 - 234.56 + 67.8 = **302.31**

16. 456.7 - 234.89 + 123.45 - 67.8 = **277.46**

17. 789.45 + 123.6 - 456.78 + 234.5 = **690.77**

18. 234.5 - 123.67 + 456.8 - 234.56 = **333.07**

Section C: Word Problems

19. £12.45 + £3.67 + £5.89 = **£22.01**

20. £145.67 + £23.45 - £67.89 = **£101.23**

21. 2.5 + 1.75 + 0.85 = **4.1 kg**

22. 3.7 + 4.85 + 2.95 = **11.5 km**

23. £1,250.50 - £345.67 - £234.89 - £156.75 = **£513.19**

24. 45.67 + 23.8 - 12.45 = **57.02 mL**

Section D: Problem Solving Challenges

25. 23.4 + **8.23** - 12.67 = 18.9

26. Estimate: **Greater than 100** (34 + 29 + 31 + 7 = 101 approximately)

27. 2.75 + 3.2 + 2.95 - 1.85 = **7.05 kg**

28. **22.1, 25.3** (adding 3.2 each time)

29. £2.45 + £1.67 + £3.89 = £8.01. **Yes, he has enough. Change = £0.76**

30. 156.7 - 34.85 - 23.9 - 45.67 = **52.28 cm**

Teaching Notes

Common Mistakes to Watch For:

- **<u>Alignment</u>**: Not aligning decimal points when adding/subtracting

- **<u>Placeholders</u>**: Forgetting to include zeros as placeholders

- **<u>Word Problems</u>**: Misreading whether to add or subtract

- **<u>Mixed Operations</u>**: Incorrect order of operations with multiple steps

Extension Activities:

- Create decimal word problems using real store prices

- Practice estimating before calculating exact answers

- Use a calculator to check difficult calculations

- Research decimal usage in sports (times, distances, scores)

Assessment Criteria:

- **<u>Excellent (36-40 marks)</u>**: Confident with all operations, minimal errors

- **<u>Good (30-35 marks)</u>**: Mostly accurate, minor calculation mistakes

- **<u>Satisfactory (24-29 marks)</u>**: Basic understanding, some alignment issues

- **<u>Needs Support (<24 marks)</u>**: Requires additional practice with decimal concepts

This answer key corresponds to: add-subtract-decimals.md