Educational Worksheet

Grade 7 Mathematics Worksheet

Add and Subtract Decimals

Name: _____ **Date:** _____ **Class:** _____

Learning Objectives

By the end of this worksheet, you will be able to: - Add and subtract decimals with different numbers of decimal places - Solve word problems involving decimal operations - Check answers using estimation

Instructions

- Show all your working
- Line up decimal points when adding or subtracting
- Check your answers make sense
- Use a calculator only when instructed

Section A: Basic Addition and Subtraction (10 marks)

Add or subtract the following decimals:

1. 23.4 + 15.7 = _____

2. 67.89 + 23.4 = _____

3. 156.7 - 89.3 = _____

4. 45.67 - 28.9 = _____

5. 123.456 + 67.89 = _____

6. 234.5 - 167.89 = _____

7. 89.7 + 123.45 + 67.8 = _____

8. 456.78 - 289.456 = _____

9. 12.345 + 67.8 + 123.45 = _____

10. 789.4 - 456.789 = _____

Section B: Mixed Operations (8 marks)

Calculate the following, showing all working:

11. 45.6 + 23.78 - 12.9 = _____

12. 123.4 - 67.89 + 45.6 = _____

13. 234.56 + 78.9 - 156.78 = _____

14. 67.8 - 23.456 + 89.7 = _____

15. 345.67 + 123.4 - 234.56 + 67.8 = _____

16. 456.7 - 234.89 + 123.45 - 67.8 = _____

17. 789.45 + 123.6 - 456.78 + 234.5 = _____

18. 234.5 - 123.67 + 456.8 - 234.56 = _____

Section C: Word Problems (12 marks)

Solve these real-world problems:

19. **Shopping Trip**: Sarah bought a book for £12.45, a pen for £3.67, and a notebook for £5.89. How much did she spend in total?

    Answer: £_____

20. **Savings Account**: Tom had £145.67 in his savings account. He deposited £23.45 and then withdrew £67.89. How much money does he have now?

    Answer: £_____

21. **Recipe Measurements**: A recipe calls for 2.5 kg of flour, 1.75 kg of sugar, and 0.85 kg of butter. What is the total weight of these ingredients?

    Answer: _____ kg

22. **Distance Tracking**: Maria ran 3.7 km on Monday, 4.85 km on Tuesday, and 2.95 km on Wednesday. How far did she run in total over the three days?

    Answer: _____ km

23. **Budget Planning**: A family has a monthly budget of £1,250.50. They spent £345.67 on groceries, £234.89 on utilities, and £156.75 on entertainment. How much money do they have left?

    Answer: £_____

24. **Science Experiment**: In a chemistry experiment, 45.67 mL of solution A was mixed with 23.8 mL of solution B. Then 12.45 mL of the mixture evaporated. How much solution was left?

    Answer: _____ mL

Think carefully about these problems:

25. **Number Puzzle**: Find the missing number: 23.4 + _____ - 12.67 = 18.9

    Answer: _____

26. **Estimation Check**: Without calculating exactly, estimate whether this sum is greater than or less than 100: 34.67 + 28.9 + 31.45 + 6.78

    Estimate: Greater than / Less than 100 (circle one) **Reason:** _____

27. **Multi-step Problem**: A baker made 3 batches of cookies. The first batch weighed 2.75 kg, the second batch weighed 3.2 kg, and the third batch weighed 2.95 kg. If 1.85 kg of cookies were sold, how many kilograms of cookies were left?

    Answer: _____ kg

28. **Decimal Sequences**: Complete this sequence: 12.5, 15.7, 18.9, _____, _____, 28.5

    Answer: _____, _____

29. **Money Problem**: James has three coins worth £2.45, £1.67, and £3.89. He wants to buy something that costs £7.25. Does he have enough money? If so, how much change will he get? If not, how much more does he need?

    Answer: _____

30. **Measurement Challenge**: A piece of wood is 156.7 cm long. Three pieces measuring 34.85 cm, 23.9 cm, and 45.67 cm are cut from it. How much wood is left?

    Answer: _____ cm

Total: _____ / 40 marks

Self-Assessment

- I can add decimals accurately: □ Confident □ Mostly □ Need practice
- I can subtract decimals accurately: □ Confident □ Mostly □ Need practice
- I can solve decimal word problems: □ Confident □ Mostly □ Need practice
- I check my answers make sense: □ Always □ Sometimes □ Rarely