



# **11+ Ratio & Proportion Worksheet — Mixed Ability**

**Suitable for GL, Independent Schools, and  
Grammar School Preparation**

## SECTION A — Core Ratio Skills (1–6)

1. Simplify the ratio 12:16.

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2. Simplify the ratio 45:15.

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3. Write 3:4 in its simplest form.

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4. A recipe uses flour and sugar in the ratio 2:1. If you have 10 cups of flour, how many cups of sugar do you need?

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**5. Simplify the ratio 18:27.**

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**6. Write the ratio 50:100 in simplest form.**

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## SECTION B — Sharing Amounts in a Ratio (7–10)

7. Share 60 in the ratio 1:2.

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8. Share 90 in the ratio 3:2.

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9. Share 120 in the ratio 4:1.

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10. £150 is shared between A and B in the ratio 5:1. How much does A receive?

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## SECTION C — Scaling & Proportion (11–15)

11. A recipe for 4 people uses 12 strawberries. How many strawberries are needed for 10 people?

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12. A map scale shows 1 cm represents 5 km. How many km does 7 cm represent?

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13. A model car is built at a scale of 1:20. If the real car is 4 m long, how long is the model?

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14. A picture is enlarged in the ratio 3:2. If the original height was 12 cm, what is the new height?

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**15. A class has boys and girls in the ratio 7:5. If there are 42 boys, how many girls are there?**

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## SECTION D — Higher-Ability Reasoning (16–20)

16. A number is split into two parts in the ratio 3:4. The larger part is 32. What is the smaller part?

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17. A bag contains red and blue counters in the ratio 5:3. If there are 64 counters in total, how many are red?

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18. A car travels 120 km in 2 hours. How far will it travel in 5 hours at the same speed?

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19. A rectangle's sides are in the ratio 5:2. If the longer side is 35 cm, what is the shorter side?

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**20. A number is increased in the ratio 7:5 to become 84. What was the original number?**

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# ANSWERS

| Question Numbers | Answers   | Question Numbers | Answers         |
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| 1                | 3:4       | 11               | 30 strawberries |
| 2                | 3:1       | 12               | 35 km           |
| 3                | 3:4       | 13               | 20 cm           |
| 4                | 5 cups    | 14               | 18 cm           |
| 5                | 2:3       | 15               | 30 girls        |
| 6                | 1:2       | 16               | 24              |
| 7                | 20 and 40 | 17               | 40 red          |
| 8                | 54 and 36 | 18               | 300 km          |
| 9                | 96 and 24 | 19               | 14 cm           |
| 10               | £125      | 20               | 60              |