

Answer Key — Division Facts (Inverse of Tables)

Year 4 Mathematics · Number and algebra · WA4MNADI1

Section A — Fluency (16 marks, 1 mark each)

1. 7
2. 9
3. 7
4. 8
5. 6
6. 7
7. 9
8. 8
9. 7
10. 9
11. 6
12. 4
13. 8
14. 9
15. 8
16. 7

Section B — Core (21 marks)

1. $48 \div 6 = 8$ biscuits each. [2 marks working, 1 mark correct answer]
2. $72 \div 8 = 9$ stickers each to start; $9 - 2 = 7$ stickers left per student. [2 marks first step, 2 marks second step]
3. $63 \div 7 = 9$ rows. [2 marks working, 1 mark correct answer]
4. $80 \div 10 = 8$ apples per bag; $3 \text{ bags} \times 8 = 24$ apples given away. [2 marks first step, 2 marks second step]
5. $54 \div 9 = 6$ boxes needed. [2 marks working, 1 mark correct answer]
6. $56 \div 8 = 7$ rows to start; $7 - 3 = 4$ rows remain; $4 \times 8 = 32$ chairs left set up. [2 marks first step, 2 marks second step]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. Division is the inverse of multiplication, so since $7 \times 8 = 56$, we know $56 \div 8 = 7$ (and $56 \div 7 = 8$). [2 marks]
2. $9 \times 6 = 54$, not 63, so $63 \div 9 \neq 6$. The correct answer is $63 \div 9 = 7$ (check: $9 \times 7 = 63$). [2 marks]
3. $56 \div 8$ asks how many groups of 8 make 56 (answer 7), while $56 \div 7$ asks how many groups of 7 make 56 (answer 8) — same total, different-sized groups. [2 marks]
4. False. Dividing a number by 1 does not make it smaller, e.g. $9 \div 1 = 9$, which is the same as the original number. [2 marks valid example, 1 mark for correctly saying false]

Section D — Challenge (7 marks)

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1. $64 \div 8 = 8$. The dividend 64 is between 60 and 70, and the quotient is 8. [2 marks]
2. $9 \times 7 = 63$, so the number is 63. [2 marks]
3. Three team sizes work: 6 students per team ($72 \div 6 = 12$ teams), 8 students per team ($72 \div 8 = 9$ teams), and 9 students per team ($72 \div 9 = 8$ teams); 7 does not divide 72 evenly. [2 marks finding all three sizes, 1 mark correct team counts]