

Year 5: Dividing in your head: answers

Year 5 - Short Division and Remainders - Lesson 5.2

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-5/ch05-division/dividing-in-your-head/

Exercise 5B Dividing in your head Non-calculator

1 Use your times tables to work out each division.

(a) $36 \div 9 =$

Answer: 4

(b) $72 \div 8 =$

Answer: 9

(c) $63 \div 7 =$

Answer: 9

(d) $48 \div 12 =$

Answer: 4

(e) $121 \div 11 =$

Answer: 11

(f) $132 \div 12 =$

Answer: 11

(g) $54 \div 6 =$

Answer: 9

(h) $81 \div 9 =$

Answer: 9

2 Use a times table fact and place value to work out each answer.

(a) $3,600 \div 9 =$

Answer: 400

(b) $280 \div 7 =$

Answer: 40

(c) $4,500 \div 5 =$

Answer: 900

(d) $810 \div 9 =$

Answer: 90

3 Work out each division. Take care with the zeros.

(a) $4,200 \div 60 =$

Answer: 70

(b) $3,600 \div 90 =$

Answer: 40

(c) $560 \div 70 =$

Answer: 8

(d) $8,100 \div 900 =$

Answer: 9

4 You know that $6 \times 40 = 240$. Use this fact to work out each division.

(a) $240 \div 6 =$

Answer: 40

(b) $240 \div 40 =$

Answer: 6

(c) $2,400 \div 6 =$

Answer: 400

5 Write the four facts in each fact family.

(a) The numbers 9, 6 and 54.

Answer: $9 \times 6 = 54$, $6 \times 9 = 54$, $54 \div 9 = 6$, $54 \div 6 = 9$

(b) The numbers 8, 70 and 560.

Answer: $8 \times 70 = 560$, $70 \times 8 = 560$, $560 \div 8 = 70$, $560 \div 70 = 8$

6 Find each missing number. Use the opposite operation.

(a) $\boxed{?} \div 7 = 12$

Answer: 84

(b) $\boxed{?} \div 9 = 8$

Answer: 72

(c) $72 \div \boxed{?} = 9$

Answer: 8

(d) $55 \div \boxed{?} = 11$

Answer: 5

7 Halve to divide by 2. Work out each division in your head.

(a) $148 \div 2 =$

Answer: 74

(b) $356 \div 2 =$

Answer: 178

(c) $762 \div 2 =$

Answer: 381

(d) $1,584 \div 2 =$

Answer: 792

8 Halve twice to divide by 4, or three times to divide by 8.

(a) $316 \div 4 =$

Answer: 79

(b) $528 \div 4 =$

Answer: 132

(c) $456 \div 8 =$

Answer: 57

(d) $1,208 \div 8 =$

Answer: 151

9 Work out each division in your head.

(a) $235 \div 5 =$

Answer: 47

(b) $460 \div 20 =$

Answer: 23

(c) $375 \div 25 =$

Answer: 15

(d) $1,200 \div 25 =$

Answer: 48

10 Divide in two steps by splitting the divisor into factors.

(a) $324 \div 6 =$

Answer: 54

(b) $252 \div 12 =$

Answer: 21

(c) $480 \div 15 =$

Answer: 32

11 Split each number into chunks to work out the division.

(a) $168 \div 7 =$

Answer: 24

(b) $1,140 \div 6 =$

Answer: 190

(c) $3,150 \div 5 =$

Answer: 630

- 12** There are 600 football cards. They are put into boxes of 25 cards. How many boxes are needed?

Answer: 24 boxes

- 13** A baker makes 960 rolls. She puts 20 rolls in each bag. How many bags does she fill?

Answer: 48 bags

- 14** Ben says, " $56 \div 8 = 7$, so $560 \div 8 = 7$." What mistake has Ben made? What is the correct answer?

Answer: 70. Ben forgot to put the zero back.

- 15** Prove that dividing by 4 gives the same answer as halving twice. Use 36, 72 and 124 as examples, and explain why it works.

Answer: Yes. Dividing by 4 is the same as halving twice.

- 16** Which is the odd one out? Explain how you know. $560 \div 8$ $490 \div 7$ $4,200 \div 60$ $3,600 \div 60$

Answer: $3,600 \div 60$

- 17** Challenge! Dev thinks of a number. He divides it by 8 and then adds 15. His answer is 40. What number did Dev think of?

Answer: 200