

Year 5: Bigger numbers, zeros, estimating and checking: answers

Year 5 - Short Division and Remainders - Lesson 5.4

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/bigger-numbers-zeros-estimating-and-checking/

Exercise 5D Four-digit numbers and zeros Non-calculator

1 Work out each division. The numbers have 4 digits.

(a) $4,368 \div 3 =$

Answer: 1,456

(b) $7,245 \div 5 =$

Answer: 1,449

(c) $8,274 \div 6 =$

Answer: 1,379

2 Work out each division. There is a zero in the number you are dividing.

(a) $2,016 \div 4 =$

Answer: 504

(b) $3,060 \div 5 =$

Answer: 612

(c) $9,045 \div 9 =$

Answer: 1,005

3 Work out each division. There is a zero in each answer.

(a) $6,314 \div 7 =$

Answer: 902

(b) $8,240 \div 4 =$

Answer: 2,060

(c) $5,406 \div 6 =$

Answer: 901

4 Quick-fire! Work out each answer. Watch out for the zeros.

(a) $4,000 \div 5 =$

Answer: 800

(b) $6,300 \div 9 =$

Answer: 700

(c) $9,000 \div 3 =$

Answer: 3,000

(d) $8,008 \div 8 =$

Answer: 1,001

(e) $2,010 \div 3 =$

Answer: 670

5 Work out each division. Write each answer with a remainder.

(a) $3,456 \div 5 =$

Answer: 691 r 1

(b) $5,929 \div 8 =$

Answer: 741 r 1

(c) $9,999 \div 7 =$

Answer: 1,428 r 3

6 Estimate the answer to each division. Round to a number that the divisor goes into easily.

(a) $4,823 \div 6$

Answer: 800

(b) $7,184 \div 9$

Answer: 800

(c) $2,968 \div 3$

Answer: 1,000

7 Estimate first. Then use short division to work out each division, with a remainder. Is your answer close to the estimate?

(a) $7,184 \div 9$

Answer: 798 r 2

(b) $4,823 \div 6$

Answer: 803 r 5

8 Use multiplication to check each answer. Write yes or no. If the answer is wrong, write the correct one.

(a) Zainab says $1,359 \div 3 = 453$.

Answer: Yes

(b) Leo says $2,184 \div 6 = 365$.

Answer: No. $2,184 \div 6 = 364$

(c) Mei says $4,015 \div 5 = 83$.

Answer: No. $4,015 \div 5 = 803$

9 Mia is working out $6,048 \div 8$. Here is her working so far.

$$\begin{array}{r} 0 \\ 8 \overline{) 6048} \\ \underline{6} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

(a) What does Mia write above the 0?

Answer: 7

(b) What number is carried in front of the 4?

Answer: 4

(c) What is the final answer?

Answer: 756

10 Work out the answer to each problem. The bar model will help.

(a) A charity shares 3,648 books equally between 8 schools. How many books does each school get?

Answer: 456 books

(b) A factory puts 7,500 screws into boxes of 5. How many boxes does it fill?

Answer: 1,500 boxes

(c) A stadium has 9,072 seats in 9 equal blocks. How many seats are in each block?

Answer: 1,008 seats

11 A bakery makes 2,480 buns in 8 hours. It makes the same number of buns each hour. How many buns does it make in 5 hours?

Answer: 1,550 buns

12 Mia works out $5,418 \div 6$ and gets 93. Is she correct? Explain what she has done wrong.

Answer: No. The correct answer is 903. Mia left out a zero.

13 Always, sometimes or never?

(a) A 4-digit number divided by 4 gives a 3-digit answer.

Answer: Sometimes

(b) If a number divides exactly by 4, it also divides exactly by 2.

Answer: Always

14 Prove it! Show that $3,150 \div 6 = 525$ using a multiplication.

Answer: $525 \times 6 = 3,150$

15 Challenge! Use each digit card once: 2, 4, 6, 9. Make a 3-digit number and a 1-digit number. Divide the 3-digit number by the 1-digit number. What is the biggest whole-number answer you can make?

Answer: 482