

Year 5: Estimating and checking: answers

Year 5 - Long Multiplication - Lesson 4.5

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/ch04-multiplication/estimating-and-checking/

Exercise 4E Estimating and checking Non-calculator

1 Estimate each answer by rounding.

(a) 38×52

Answer: 2,000

(b) 71×29

Answer: 2,100

(c) 412×18

Answer: 8,000

(d) $2,986 \times 4$

Answer: 12,000

2 Choose the best estimate for each multiplication.

(a) 49×31 A 150 B 1,500 C 15,000 D 2,500

Answer: B (1,500)

(b) 612×19 A 1,200 B 12,000 C 120,000 D 18,000

Answer: B (12,000)

(c) $3,945 \times 6$ A 2,400 B 24,000 C 240 D 18,000

Answer: B (24,000)

3 Use an estimate to decide if each answer could be right.

(a) $48 \times 52 = 3,496$

Answer: No, it cannot be right

(b) $23 \times 41 = 943$

Answer: Yes, it could be right

(c) $612 \times 19 = 11,628$

Answer: Yes, it could be right

(d) $304 \times 28 = 851$

Answer: No, it cannot be right

4 Check the last digit of each answer. Write "Wrong" or "Might be right".

(a) $37 \times 43 = 1,592$

Answer: Wrong

(b) $126 \times 34 = 4,282$

Answer: Wrong

(c) $58 \times 67 = 3,886$

Answer: Might be right

(d) $215 \times 48 = 10,330$

Answer: Might be right

5 You know that $23 \times 45 = 1,035$. Use this to work out each answer.

(a) $23 \times 46 =$

Answer: 1,058

(b) $24 \times 45 =$

Answer: 1,080

(c) $230 \times 45 =$

Answer: 10,350

(d) $1,035 \div 45 =$

Answer: 23

6 You know that $12 \times 15 = 180$. Use this to work out each answer.

(a) $12 \times 30 =$

Answer: 360

(b) $6 \times 15 =$

Answer: 90

(c) $120 \times 15 =$

Answer: 1,800

(d) $11 \times 15 =$

Answer: 165

7 Estimate first. Then work out the exact answer and check it is close to your estimate.

(a) 28×67

Answer: 1,876

(b) 312×45

Answer: 14,040

8 Pens cost 69p each. Mrs Okoye has £20. She wants to buy 28 pens. Use an estimate to show that £20 is enough.

Answer: Yes, it is enough

9 A delivery van drives 38 km every day for 52 days. Estimate the total distance it drives.

Answer: about 2,000 km

10 Amir estimates 348×47 by working out $350 \times 50 = 17,500$. Is his estimate bigger or smaller than the real answer? Explain how you know.

Answer: Bigger

11 Show that $6,018 \times 5$ is more than 30,000 without working out the exact answer.

Answer: $6,018 \times 5$ is more than 30,000

12 Zainab estimates 412×38 as $400 \times 30 = 12,000$. What mistake has she made? Write a better estimate.

Answer: She rounded 38 down to 30; it should be 40. Better estimate: 16,000.

13 Challenge! Which is bigger, 49×51 or 50×50 ? Show how you know.

Answer: 50×50 (2,500 is bigger than 2,499)