

Whole Number Multiplication and Division Exam Practice



Multiplication

1. Calculate 32×95 showing full working.

$$\begin{array}{r} 90 \\ \times 32 \\ \hline 180 \\ + 2700 \\ \hline 2880 \end{array} \quad \begin{array}{r} 32 \\ \times 5 \\ \hline 160 \end{array} \Rightarrow \begin{array}{r} 2880 \\ + 160 \\ \hline 3040 \end{array}$$

Answer: 3040
(2 marks)

2. Evaluate 156×78 showing your method clearly.

$$\begin{array}{r} 156 \\ \times 70 \\ \hline 10920 \end{array} \quad \begin{array}{r} 156 \\ \times 8 \\ \hline 1248 \end{array} \Rightarrow \begin{array}{r} 10920 \\ + 1248 \\ \hline 12168 \end{array}$$

Answer: 12168
(2 marks)

3. Determine the value of 8×5623 showing clear working.

$$\begin{array}{r} 5623 \\ \times 8 \\ \hline 44984 \end{array}$$

Answer: 44984
(2 marks)



Division

4. Calculate $792 \div 33$ showing your method.

$$\begin{array}{r} 24 \\ 33 \overline{) 792} \\ \underline{-660} \\ 132 \\ \underline{-132} \\ 0 \end{array}$$

Answer: 24
(2 marks)

5. Evaluate $885 \div 15$ showing clearly each step of your calculation

$$\begin{array}{r} 59 \\ 15 \overline{) 885} \\ \underline{-750} \\ 135 \\ \underline{-135} \\ 0 \end{array}$$

Answer: 59
(2 marks)

6. Determine the value of $3312 \div 33$ showing clear method at every stage.

$$\begin{array}{r} 276 \\ 33 \overline{) 3312} \\ \underline{-2400} \\ 912 \\ \underline{-840} \\ 72 \end{array}$$

Answer: 276
(2 marks)



Special Cases:

7. Calculate 25×84 showing full working.

$$84 \times 100 = 8400$$

$$8400 \div 4 = 2100$$

Answer: 2100
(2 marks)

8. Calculate 25×128 showing full working.

$$128 \times 100 = 12800$$

$$12800 \div 4 = 3200$$

Answer: 3200
(2 marks)

9. Calculate 56×99 showing full working.

$$56 \times 100 = 5600$$

$$5600 - 56 = 5544$$

Answer: 5544
(2 marks)



10. Calculate $3200 \div 25$ showing full working.

$$3200 \div 100 = 32$$

$$32 \times 4 = 128$$

Answer: 128
(2 marks)

11. Calculate $7000 \div 25$ showing full working.

$$7000 \div 100 = 70$$

$$70 \times 4 = 280$$

Answer: 280
(2 marks)

12. Calculate 41×39 showing full working.

$$40^2 - 1$$
$$= 1599$$

Answer: 1599
(2 marks)



Using a given Calculation to Find Another

13. Given that $45 \times 68 = 3060$, work out:

(i) 4500×680

$$3060000$$

Answer: 3060000
(1 mark)

(ii) $30600 \div 450$

$$68$$

Answer: 68
(1 mark)

14. Given that $366 \times 95 = 34770$, work out:

(i) 3.66×95000

$$347700$$

Answer: 347700
(1 mark)

(ii) $34770 \div 183$

$$190$$

Answer: 190
(2 marks)

(iii) $3477000 \div 732$

$$732 \times 475 = 347700$$

$$3477000 \div 732 = 4750$$

Answer: 4750
(2 marks)



Applied Mixed Practice Problems

15. Tom sells cakes for 30p each at the College Fair.
At the end of the day, he has sold 15 cakes.
How much money did he make?

$$30 \times 15 = 450p$$

$$£4.50$$

Answer: £4.50
(2 marks)

16. Paul and his 5 brothers share a tub of "Salutations" sweets.
They are 144 sweets in the tub.
How many sweets do they get each?

$$144 \div 6 = 24$$

Answer: 24
(2 marks)

17. The latest model of car down at the showroom will go for 44 miles on a gallon of petrol.
Mr Smythe will be driving 750 miles next week whilst on holiday.
How many gallons of petrol will he need to complete his journey?

$$\begin{array}{r} 17 \\ 44 \overline{) 750} \\ \underline{440} \\ 310 \\ \underline{308} \\ 2 \end{array}$$

Answer: 18
(3 marks)



18. Josh is a local artist, and is selling his paintings of the seashore for £15 each. He wants to earn £2000 by the end of the summer. How many paintings will he need to sell to achieve his aim?

$$\begin{array}{r} 133 \\ 15 \overline{) 2000} \\ \underline{- 1500} \\ 500 \\ \underline{- 450} \\ 50 \\ \underline{- 45} \\ 5 \end{array}$$

Answer: 134
(3 marks)

19. Kate has 7 rabbits. Each rabbit eats 3 carrots a day. Carrots are sold in bags of 15. How many bags of carrots will she need to buy to feed the rabbits for year?

$$7 \times 3 \times 365 = 7665 \quad \text{Carrots in total}$$
$$\begin{array}{r} 511 \\ 15 \overline{) 7665} \\ \underline{- 7500} \\ 165 \end{array}$$

Answer: 511
(4 marks)

20. For the new restaurant at Pickering, there will be six chairs around each table. There will be 14 tables in total in the restaurant. The manager is also opening two other identical branches in Burnley and Redcar. How many chairs will they have to buy in total to set up the three restaurants?

$$3 \times 6 \times 14 = 252$$

Answer: 252
(3 marks)



21. Emma wants to cover her living room in a new carpet, which costs £4.30 per m^2 .
The total area of her living room is 18 m^2 . What is the cost of her new carpet?

$$18 \times 4.30 = 77.40$$

Answer: £77.40
(2 marks)

22. Pizzas can be cut into 8 slices. How many pizzas need to be bought to feed 300 students, if they have one slice each?

$$\begin{array}{r} 37 \\ 8 \overline{) 300} \\ \underline{240} \\ 60 \\ \underline{56} \\ 4 \end{array}$$

Answer: 38
(2 marks)

23. Sid runs a local DIY store, and is currently ordering supplies of light-bulbs. The light-bulbs come in packs of 20. Sid decides to order 350 packs. How many light-bulbs will he have in stock?

$$350 \times 20 = 7000$$

Answer: 7000
(2 marks)