Worksheet - Times tables to 12 x 12

Year: Year 4 · 20

Show your working.

Question 1

Question 1 – Times table facts *(Section A · Practice)*

Write the answer to each multiplication. Try to answer from memory, then check using a strategy.

a. 3 × 7
b. 4 × 8
c. 6 × 6
d. 9 × 5
e. 7 × 9
f. 12 × 4

Question 2

Question 2 – Division facts *(Section A · Practice)*

Use the times tables you know to work out each division. Say which multiplication fact helps you.

a. 48 ÷ 6
b. 81 ÷ 9
c. 132 ÷ 11
d. 108 ÷ 12
e. 72 ÷ 8
f. 56 ÷ 7

Question 3

Question 3 – Fact families *(Section A · Practice)*

Each box shows three numbers. For each box, write all four number sentences (two multiplications and two divisions).

a. 7, 9, 63
b. 8, 11, 88
c. 6, 12, 72

Question 4

Question 4 – Multiplying three numbers *(Section A · Practice)*

Work out each product. Choose the order that makes the calculation easy and show your steps.

a. 2 × 7 × 5
b. 4 × 9 × 5
c. 2 × 8 × 5
d. 3 × 6 × 4

Question 5

Question 5 – Missing numbers *(Section A · Practice)*

Find the missing number in each calculation.

a. ■ × 7 = 56
b. 9 × ■ = 108
c. ■ ÷ 6 = 8
d. 96 ÷ ■ = 12
e. 11 × 11 = ■

Question 6

Question 6 – Multiples and factors *(Section A · Practice)*

Answer each question about multiples, factors and square numbers.

a. Write the first six multiples of 7.
b. List all the factors of 18.
c. Which of these are square numbers: 16, 24, 49, 64, 72?
d. Write the next two numbers in the sequence 9, 18, 27, 36, ...

Question 7

Question 7 – Eggs for the cafe *(Section B · Real-life practice)*

The Sunny Side Cafe buys eggs in boxes. One box holds 12 eggs. The cafe uses 7 boxes in a week for cooking and 3 boxes for the cake stall.

a. How many eggs are in 7 boxes?
b. How many eggs does the cafe buy in total?
c. The cooks make omelettes with 3 eggs each. How many omelettes can they make from 7 boxes?
d. A tray of eggs holds 6 eggs. How many trays equal 1 box?

Question 8

Question 8 – Cinema seats *(Section B · Real-life practice)*

The Rex Cinema has 9 rows of seats in Screen 1. Each row has 8 seats. Screen 2 has

11 rows of 12 seats.

a. How many seats are in Screen 1?
b. How many seats are in Screen 2?
c. How many more seats are in Screen 2 than in Screen 1?
d. A school group of 72 pupils want to sit together in Screen 1. How many full rows do they need?

Question 9

Question 9 – Sticker albums *(Section B · Real-life practice)*

Mia collects football stickers. A pack has 6 stickers and costs £1. An album has 12 pages with 8 stickers on each page.

a. How many stickers are needed to fill the album?
b. How many packs of 6 stickers make 96 stickers?
c. Mia has 7 packs. How many stickers is that? How many more stickers does she need to fill the album?
d. What do 7 packs cost?

Question 10

Question 10 – School trip coaches *(Section B · Real-life practice)*

Year 4 are going to a museum. Each coach carries 12 children. There are 9 coaches. The teachers pay £5 for each child for the entrance ticket.

a. How many children are going on the trip?
b. How much does the museum charge for all the children?
c. If each table in the cafe seats 8 children, how many tables do 96 children need?
d. Three of the coaches arrive late with 12 children each. How many children are waiting for those coaches?

Question 11

Question 11 – Plants in the garden *(Section B · Real-life practice)*

Mr Singh has a vegetable garden with 11 rows of lettuces. In each row there are 7 lettuces. He also plants 6 rows of carrots with 12 carrots in each row.

a. How many lettuces does he plant?
b. How many carrots does he plant?
c. He plants 2 times as many beans as lettuces. How many beans does he plant?
d. Which crop has more plants: lettuces or carrots? By how many?

Question 12

Question 12 – The cake sale *(Section B · Real-life practice)*

The school cake sale sells cupcakes in boxes of 6 and cookies in bags of 12. Each box of cupcakes costs £4 and each bag of cookies costs £3.

a. Mrs Brown buys 8 boxes of cupcakes. How many cupcakes is that and how much does she pay?
b. She also buys 5 bags of cookies. How many cookies is that and how much does she pay?
c. What is her total bill?
d. The sale started with 144 cookies. How many bags of 12 can be filled?

Question 13

Question 13 – Train carriages *(Section B · Real-life practice)*

A train has 8 carriages. Each carriage has 12 tables with 4 seats at each table.

a. How many seats are in 1 carriage?
b. How many seats are on the whole train?
c. On a busy day 300 people want to travel. How many people cannot get a seat?
d. The train company wants 11 carriages. How many seats would that give?

Question 14

Question 14 – Hotel rooms *(Section B · Real-life practice)*

The Seaview Hotel has 12 floors. Each floor has 9 bedrooms. Each bedroom has 2 beds. The hotel charges £8 for a child’s breakfast and £11 for an adult’s breakfast.

a. How many bedrooms does the hotel have?
b. How many beds does it have in total?
c. A group of 6 adults and 7 children have breakfast. How much do they pay?
d. On Saturday all 108 bedrooms are full, and each bedroom has 2 guests. How many guests is that?

Question 15

Question 15 – Market stall *(Section C · Problem solving)*

Dev runs a fruit stall at the Saturday market. The table shows the price and the number of boxes he sells.

Fruit	Price per box	Boxes sold
Apples	£6	9
Pears	£7	8

Fruit	Price per box	Boxes sold
Plums	£8	7
Cherries	£9	6

a. How much money does Dev take for the apples? And for the pears?
b. What does he take in total for the four fruits?
c. Dev says "The plums and the cherries took the same amount." Is he right?
d. Each box of apples holds 12 apples. How many apples did he sell? How many apples would 5 more boxes hold?
e. Dev wants to take £250 in total. Did he reach this? By how much?

Question 16

Question 16 – Tiling the kitchen *(Section C · Problem solving)*

Sam’s mum is tiling a kitchen wall. The wall is 11 tiles wide and 8 tiles high. She also wants a border of 12 tiles along the top of another wall, and 4 decorative tiles in each of 6 places.

a. How many tiles cover the main wall?
b. How many decorative tiles does she need in total?
c. Tiles are sold in boxes of 12. How many boxes does she need for the main wall? (Be careful: she cannot buy part of a box.)
d. How many tiles are left over from the boxes in part (c)?
e. Each box costs £9. What is the cost of the boxes in part (c)?

Question 17

Question 17 – School hall chairs *(Section C · Problem solving)*

The school hall is set out for a concert. There are 12 rows with 9 chairs in each row. At the back there are 3 rows with 11 chairs, for the parents.

a. How many chairs are in the main part of the hall?
b. How many chairs are at the back?
c. How many chairs are there altogether?
d. The head teacher says "We need 150 chairs in total." How many extra chairs are needed?
e. The caretaker can carry 8 chairs at a time. How many trips does he need to carry the extra chairs?

Question 18

Question 18 – Sports day *(Section C · Problem solving)*

At sports day there are 4 teams. Each team has 12 children. The teams score points in 6 races. A team gets 9 points for first place, 7 points for second place and 5 points for

third place.

Race	Red team	Blue team
Sprint	9	7
Relay	7	9
Hurdles	5	9
Long jump	9	5
Egg and spoon	7	7
Tug of war	9	7

a. How many children take part in sports day altogether?
b. Work out the total points for the Red team and for the Blue team. Which team scores more?
c. The winning team gets a trophy. The head teacher says "Red scored 3 nines and 2 sevens and a five." Check that this matches the table.
d. Each child on the winning team gets a medal. How many medals are needed?
e. One medal costs £2. What do all the medals cost?

Question 19

Question 19 – Pizza party *(Section C · Problem solving)*

For a birthday party Ayesha orders pizzas. Each pizza has 8 slices. She orders 7 pizzas for the 12 children who come. There are also 2 adults.

a. How many slices of pizza are there?
b. If all 14 people share the slices equally, how many does each person get? How many are left over?
c. Each pizza costs £9. What do 7 pizzas cost?
d. She pays with £70. How much change does she get?
e. Ayesha says "If 6 more children come, we will need 4 more pizzas." Is she right? Explain.

Question 20

Question 20 – Challenge: number clues *(Section D · Challenge)*

Find the number in each puzzle. Use your times tables and factors.

a. I am a number between 100 and 150. I am in the 8 times table, the 9 times table and the 12 times table. What am I?
b. I am a square number less than 100. I am also a multiple of 3. List all the possible numbers.
c. The product of two different numbers from the 12 × 12 table is 36. Find all the pairs. Then find a pair of numbers whose product is 36 and whose sum is 13.