

Grade 3 · Multiplication and Division Facts Within 100 · Worksheet Answer Key

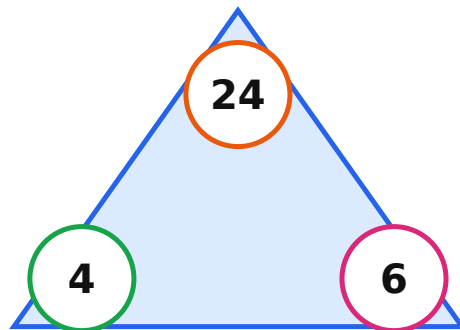
Common Core 3.OA.C.7 · mathovore.fr

Each problem below has a full worked solution, with the final answer in bold. Use the key to check your thinking as well as your answers. For any fact you miss, write its whole fact family and practice it again tomorrow.

Grade 3 Common Core: 3.OA.C.7

Problem 1: Fact family triangle

The product is 24, the biggest number. The other numbers are 4 and 6.



$$4 \times 6 = 24$$

$$6 \times 4 = 24$$

$$24 \div 4 = 6$$

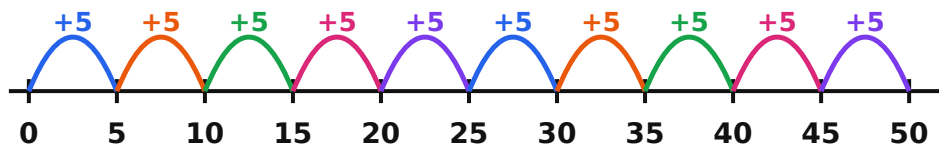
$$24 \div 6 = 4$$

The four facts in the family.

Answer: $4 \times 6 = 24$, $6 \times 4 = 24$, $24 \div 4 = 6$, $24 \div 6 = 4$.

Problem 2: Skip count by 5s

Add 5 each time: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50.



Jumps of 5 from 0 to 50.

Answer: **15, 25, 35, 45.**

Problem 3: Double it

Double each number.

- a. $2 \times 7 = 7 + 7 = \mathbf{14}$
- b. $2 \times 9 = 9 + 9 = \mathbf{18}$
- c. $2 \times 6 = 6 + 6 = \mathbf{12}$
- d. $2 \times 8 = 8 + 8 = \mathbf{16}$

Problem 4: Multiply by 5

Skip count by 5s to check.

- a. $5 \times 6 = \mathbf{30}$
- b. $5 \times 8 = \mathbf{40}$
- c. $5 \times 4 = \mathbf{20}$
- d. $5 \times 9 = \mathbf{45}$

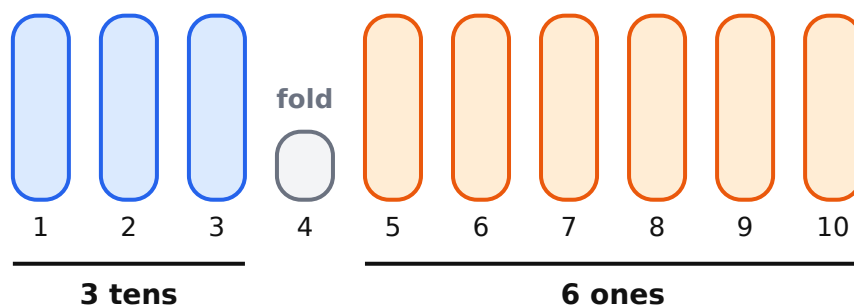
Problem 5: Tens, ones, and zero

Ten times a number puts a zero after it. One times a number is that number. Zero times any number is 0.

- a. $10 \times 7 = \mathbf{70}$
- b. $1 \times 9 = \mathbf{9}$
- c. $0 \times 8 = \mathbf{0}$
- d. $10 \times 4 = \mathbf{40}$

Problem 6: The 9s finger trick

Fold down finger 4. There are 3 fingers on the left (3 tens) and 6 fingers on the right (6 ones).



3 tens and 6 ones make 36.

$30 + 6 = 36$. Answer: $9 \times 4 = 36$.

Problem 7: Multiply by 9

Check: $5 + 4 = 9$, $7 + 2 = 9$, $2 + 7 = 9$, and $8 + 1 = 9$.

- a. $9 \times 6 = \mathbf{54}$
- b. $9 \times 8 = \mathbf{72}$
- c. $9 \times 3 = \mathbf{27}$
- d. $9 \times 9 = \mathbf{81}$

Problem 8: Square numbers

Count the dots in the array: 6 rows of 6 make 36.

- a. $6 \times 6 = \mathbf{36}$
- b. $7 \times 7 = \mathbf{49}$
- c. $8 \times 8 = \mathbf{64}$
- d. $9 \times 9 = \mathbf{81}$

Problem 9: Missing factor

- a. $7 \times 8 = 56$: **8**
- b. $6 \times 7 = 42$: **7**
- c. $8 \times 9 = 72$: **8**
- d. $4 \times 8 = 32$: **8**

Problem 10: Equal groups

Each group has 8 dots. Division: $24 \div 3 = 8$. Multiplication check: $3 \times 8 = 24$.



24 dots in 3 equal groups.

Answer: **8 dots** in each group.

Problem 11: Divide

Use a multiplication fact to check each one.

- a. $18 \div 2 = \mathbf{9}$
- b. $35 \div 5 = \mathbf{7}$
- c. $40 \div 10 = \mathbf{4}$
- d. $27 \div 9 = \mathbf{3}$

Problem 12: Think multiplication

- a. $7 \times 8 = 56$, so $56 \div 7 = 8$
- b. $9 \times 5 = 45$, so $45 \div 9 = 5$
- c. $6 \times 6 = 36$, so $36 \div 6 = 6$
- d. $8 \times 8 = 64$, so $64 \div 8 = 8$

Problem 13: Finish the fact family

The family uses 5, 7, and 35.

- a. $7 \times 5 = 35$
- b. $35 \div 5 = 7$
- c. $35 \div 7 = 5$

Answer: $7 \times 5 = 35$, $35 \div 5 = 7$, $35 \div 7 = 5$.

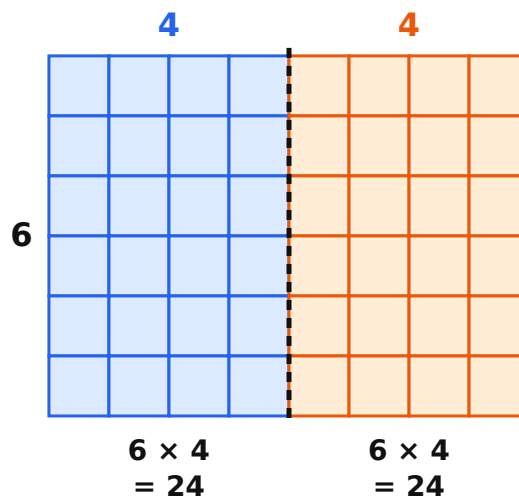
Problem 14: Break apart a square

Since $8 = 4 + 4$, the missing number is 4. Now $8 \times 4 = 32$ and $8 \times 4 = 32$. Add: $32 + 32 = 64$.

Answer: **4** and $8 \times 8 = 64$.

Problem 15: Break apart with a picture

Each part is 6 rows by 4 columns: $6 \times 4 = 24$.



Each part has 24 squares.

$24 + 24 = 48$. Answer: $6 \times 8 = 48$.

Problem 16: Use the table

Go across row 7 and down column 8, and you land on 56. Go across row 8 and down column 7, and you also land on 56.

×	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	35	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63
8	8	16	24	32	40	48	56	64	72
9	9	18	27	36	45	54	63	72	81

Row 7 column 8 and row 8 column 7 both show 56.

Answer: $7 \times 8 = 56$ and $8 \times 7 = 56$. The products match because the factors were swapped.

Problem 17: Fact fluency mix

- a. $3 \times 8 = 24$
- b. $4 \times 7 = 28$
- c. $6 \times 9 = 54$
- d. $9 \times 5 = 45$
- e. $8 \times 6 = 48$
- f. $7 \times 9 = 63$

Problem 18: Division fluency mix

- a. $42 \div 6 = 7$
- b. $63 \div 7 = 9$
- c. $81 \div 9 = 9$
- d. $48 \div 8 = 6$
- e. $72 \div 9 = 8$
- f. $36 \div 4 = 9$

Problem 19: Compare the products

- a. $6 \times 8 = 48$ and $7 \times 7 = 49$. Since 49 is greater than 48, 7×7 is greater.
b. $9 \times 4 = 36$ and $6 \times 6 = 36$. Both are 36, so **yes, they are equal**.

Problem 20: Apple baskets

Equal groups: $9 \times 4 = 36$.

Answer: **36 apples**.

Problem 21: Sticker pages

Divide: $45 \div 5 = 9$. Check: $9 \times 5 = 45$.

Answer: **9 pages**.

Problem 22: Muffin boxes

Step 1: total muffins $8 \times 6 = 48$.

Step 2: muffins per box $48 \div 6 = 8$.

Answer: **8 muffins** in each box.

Problem 23: Little League teams

Divide: $72 \div 9 = 8$. Check: $9 \times 8 = 72$.

Answer: **8 players** on each team.

Problem 24: Sticker packs

Diego: $4 \times 8 = 32$. Liam: $6 \times 8 = 48$. Together: $32 + 48 = 80$.

Check: the boys have $4 + 6 = 10$ packs of 8, and $10 \times 8 = 80$.

Answer: **80 stickers**.

Problem 25: School store shopping

Notebooks: $7 \times \$3 = \$21$. Pencils: $9 \times \$2 = \$18$.

Total: $\$21 + \$18 = \$39$.

Answer: **\$39**.