

Name :

date:

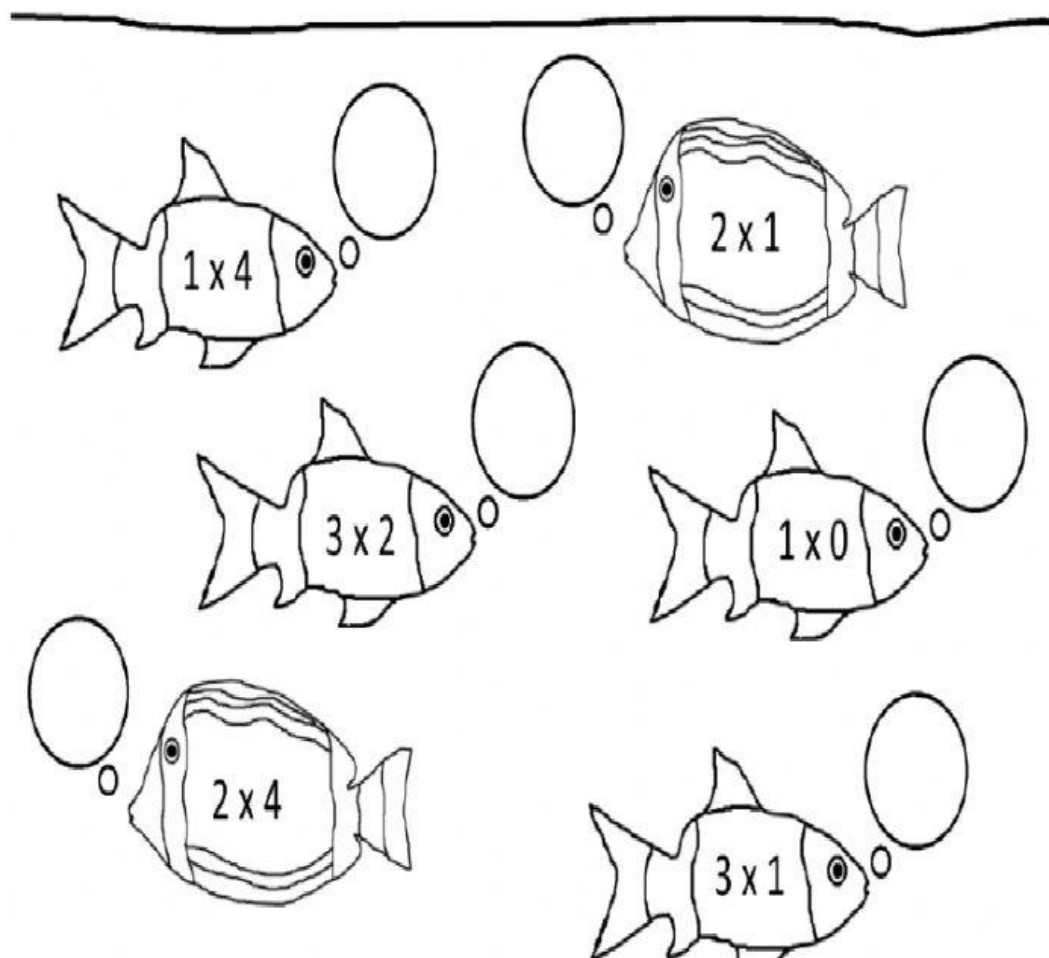
Grade :

subject :

Worksheet on 5 Times Table

5	×	0	=	_____
5	×	1	=	_____
5	×	2	=	_____
5	×	3	=	_____
5	×	4	=	_____
5	×	5	=	_____
5	×	6	=	_____
5	×	7	=	_____
5	×	8	=	_____
5	×	9	=	_____
5	×	10	=	_____
5	×	11	=	_____
5	×	12	=	_____

Write the correct answer inside the bubbles.



Powers and Exponents

A product of like factors can be written using a **base**, the number used as a factor, and an **exponent**, which tells how many times the base is used as a factor. Numbers expressed using exponents are called **powers**. For example, 100 and 1,000 are powers of 10 because they can be written 10^2 as and 10^3 .

Example 1

Write $4 \times 4 \times 4 \times 4 \times 4$ using an exponent.

$$4 \times 4 \times 4 \times 4 \times 4 = 4^5 \qquad 4 \text{ is used as a factor five times.}$$

Example 2

Write 3^4 as a product of the same factor. Then find the value.

The base is 3. The exponent is 4. So, 3 is used as a factor four times.

$$\begin{aligned} 3^4 &= 3 \times 3 \times 3 \times 3 \\ &= 81 \end{aligned} \qquad \begin{aligned} &\text{Write } 3^4 \text{ as a product.} \\ &\text{Multiply.} \end{aligned}$$

Exercises

Write each product using an exponent.

1. $4 \times 4 \times 4 =$ _____

2. $7 \times 7 \times 7 \times 7 \times 7 =$ _____

3. $9 \times 9 \times 9 \times 9 =$ _____

4. $8 \times 8 \times 8 \times 8 \times 8 \times 8 =$ _____

5. $1 \times 1 \times 1 \times 1 =$ _____

6. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 =$ _____

Powers and Exponents

Write each power as a product of the same factor. Then find the value.

a) $5^3 =$ _____

b) $6^2 =$ _____

c) $2^8 =$ _____

d) $3^6 =$ _____

e) $1.1^4 =$ _____

f) $0.7^3 =$ _____

- g) **MAMMALS** There are about 10^3 species of bats in the world. Write 10^3 as a product of the same factor. Then find the value.

- h) **LANDSCAPE** The deepest point of the Grand Canyon in Arizona is a little over 18^3 feet deep. How deep is the canyon at this point?

Write using exponents. For example, $8 \times 8 \times 8$ is written as 8^3 . You don't have to solve.

a) $6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6$ = _____

b) $10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$ = _____

Write the following in expanded form.

a) 3^{10} = _____

b) 3^8 = _____

Solve

a) 3^4 = _____

b) 8^3 = _____

c) 9^2 = _____

1) 4,8

Factors of 4 = _____

Factors of 8 = _____

$$\text{GCF}(4, 8) = \underline{\hspace{2cm}}$$

2) 12, 20

Factors of 12 = _____

Factors of 20 = _____

$$\text{GCF}(12, 20) = \underline{\hspace{2cm}}$$

The multiples of 2 are: 2, 4, 6, 8, 10, 12, 14, 16, 18...

The multiples of 3 are: **3, 6, 9, 12, 15, 18....**

The common multiples of 2 and 3 are: **6, 12, 18...**

The least common multiple of 2 and 3 is 6.



Find the LCM of 3 and 4.

The multiples of 3 are: _____, _____, _____, _____, _____, _____, _____, _____, _____ ...

The multiples of 4 are: _____, _____, _____, _____, _____, _____, _____ ...

The common multiples of 3 and 4 are: _____ and _____

The LCM of 3 and 4 is: _____