



Englische Übungen zu Terme

1. Write an expression for the following statements. Let the unknown number be n .

- a. subtract 5 from a number
- b. add 6 to a number
- c. multiply a number by 9
- d. divide a number by 8
- e. multiply a number by 5 and then add 4
- f. multiply a number by 6 and then subtract 3
- g. add 4 to a number and then multiply by 3
- h. subtract 3 from a number and then multiply by 4

2. Write a word description for the term.

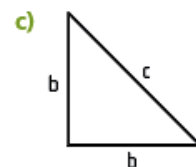
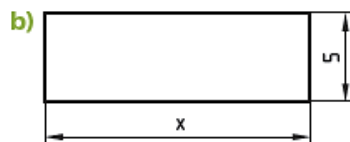
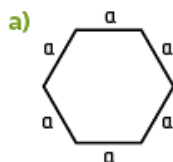
a. $(a + b) : 21$

b. $\frac{15}{x-y}$

c. $(u \cdot v)^2$

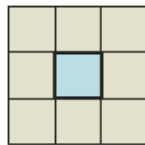
3. Write a formula for the total animal weight w of a cat weighing c kg, a dog weighing 20 kg and x chicken weighing 1.5 kg.

4. Give the formula of the perimeter p of the shape!

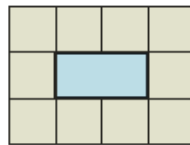




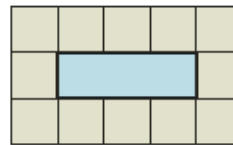
5. A gardener made ponds. They were all 1 m wide but of different lengths. She put paving stones around the edge. She wanted to know if there was a formula for the number of paving stones. Draw some more ponds that are 1 m wide. Fill in the table below. Try to find a formula that calculates the number of paving stones N for a pond of length L .



1 m x 1 m pond



1 m x 2 m pond



1 m x 3 m pond

Length of Pond L

Number of Paving Stones N

1	2	3	4	5	6	7	8
8	10	12					

6. Simplify.

- $2x(x - 1) - (2x + 1)^2 =$
- $(y - 1)(y + 4) - (y + 2)^2 =$
- $(z - 1)(2z - 3) + (z - 1)(2z + 3) =$
- $\frac{(m^5 n^3)^2}{(-m^2 n)^3} =$

7. Fill in the gaps.

- $10x^2 - 5x = \underline{\hspace{2cm}} \cdot (2x - \underline{\hspace{2cm}})$
- $(3k - 4g)^2 = \underline{\hspace{2cm}} + 16g^2$
- $(2r \underline{\hspace{2cm}})^2 = \underline{\hspace{2cm}} - 20rs \underline{\hspace{2cm}}$
- $\frac{a^3}{12} + \frac{3a^2}{4} - \frac{5a}{8} = \underline{\hspace{2cm}} \cdot \left(\frac{a^2}{3} + \underline{\hspace{2cm}} \right)$

Vocabulary

Englisch	Deutsch
expression	Ausdruck
formula	Formel
total weight	Gesamtgewicht
to weigh	wiegen
perimeter	Umfang
shape	Figur
gardener	Gärtner/in
pond	Teich
paving stones	Pflastersteine





Solutions

1.

- a. $n - 5$
- b. $n + 6$
- c. $9n$
- d. $\frac{n}{8}$

- e. $5n + 4$
- f. $6n - 3$
- g. $(n + 4) \cdot 3$
- h. $(n - 3) \cdot 4$

2.

- a. The sum of a and b divided by 21.
- b. 15 is divided by the difference of x and y.
- c. The square of u times v.

3. $w = c + 20 + x \cdot 1.5$

4.

- a. $p = 6a$
- b. $p = 2x + 10$

c. $p = a + b + c$

5. $N = 2 \cdot (3 + L)$

L	1	2	3	4	5	6	7	8
N	8	10	12	14	16	18	20	22

6.

- a. $-2x^2 + 2x + 1$
- b. $-y - 8$
- c. $4z^2 - 4z$
- d. $-m^4n^3$

7.

- a. $5x \cdot (2x - 1)$
- b. $9k^2 - 24kg + 16g^2$
- c. $(2r - 5s)^2 = 4r^2 - 20rs + 25s^2$
- d. $\frac{a}{4} \left(\frac{a^2}{3} + 3a - \frac{5}{2} \right)$

