Englische Übungen zu „Gleichungen und Formeln“

1. Solve the equation.
   a. p + 5 = 33
   b. y –12 = 2
   c. 8 · z = 72
   d. w : 9 = 13

2. There are 32 pupils in a class. There are 6 more boys than girls.
   How many girls are in the class?

3. The formula for the cost of hiring a wedding car is c = 120 + 85 h, where c is the cost in Euro, and h is the number of hours hired. Find the cost to hire a car for
   a. 4 hours,
   b. 8 hours,
   c. 6.5 hours.

4. Use the information to form an equation and then solve it to find the number.
   a. If we multiply the number by 5 and then subtract 3, the answer is 9.
   b. If we double the number and add 10, the answer is 30.
   c. If we divide the number by 2 and then add 3, the answer is 8.

5. The total mass of three coins A, B and C is 33 g. Coin B is twice as heavy as coin A and coin C is 3 g heavier than coin B. Find the mass of coin A. Form an equation to solve the exercise.

6. The angles of a triangle are α, β and γ. β is twice as big as α and γ is 10° bigger than α. Find the size of angle α.
   Note: The sum of the angles in a triangle is always 180°.

Vocabulary

Englisch	Deutsch
equation	Gleichung
to solve an equation	eine Gleichung lösen
formula	Formel
to hire	mieten
wedding car	Hochzeitsauto
to form an equation	eine Gleichung aufstellen
angle	Winkel
sum of the angles	Winkelsumme

Solutions

1. Solve the equation.

a. p = 28
b. y = 14
c. z = 9
d. w = 117

2. There are 13 girls in the class.

3.

a. To hire a car for 4 hours costs € 460 .
b. To hire a car for 8 hours costs € 800 €.
c. To hire a car for 6.5 hours costs € 672.50 .

4. Use the information to form an equation and then solve it to find the number.

a. 5x - 3 = 9; x = 2.4
b. 2x + 10 = 30; x = 10
c. x/2 + 3 = 8; x = 10

5. x … mass of coin A
x + 2x + (2x + 3) = 33
The mass of coin A is 6 grams.

6. x … size of angle α
x + 2x + (x + 10) = 180
The size of angle α is 42.5°.