Count Times Value

SY09-V1 · storyboard · SY09 Value and weight problems. Read each picture with its sentences.

Picture 1

Adults pay €9 and children €6. 50 tickets were sold for €390. How many child tickets?

$$a + c = 50 \quad \text{the count}$$

$$9a + 6c = 390 \quad \text{count × price}$$

$$9a + 6(50 - a) = 390 \quad \text{swap } c = 50 - a \text{ in}$$

$$3a = 90, \quad a = 30$$

$$\boxed{c = 20} \quad \text{child tickets}$$

1. Adults pay nine euros and children six.
2. Fifty tickets were sold for three hundred and ninety euros.
3. How many child tickets?
4. Let a and c be the numbers of adult and child tickets.
5. Fifty tickets: a + c = 50.
6. The money: nine for each adult and six for each child.
7. 9a + 6c = 390.
8. Swap c = 50 − a in.
9. So 3a = 90, and a = 30.
10. The answer: c = 20 child tickets.
11. Check: two hundred and seventy plus one hundred and twenty is three hundred and ninety.

Picture 2

Trap 390 euros

$\times \quad a + c = 390$

$\checkmark \quad 9a + 6c = 390$

A weight works the same way

$$\frac{n}{90} + \frac{q}{80} = 1$$

12. Watch for the trap: adding counts to money.
13. Money is count times price, for each kind.
14. A weight works the same way.
15. If ninety nickels weigh a pound, one nickel weighs one ninetieth of a pound, and n nickels weigh n/90.