Ratio and proportion problems (2)

7 pencils cost $£ 3.64$


How much do 4 pencils cost?

(2)

A machine can make 120 nails in 4 seconds.
a) How many nails does the machine make in 20 seconds?
$\square$
b) How many nails does the machine make in one minute?
$\square$

Alex balances some scales.


Work out the mass of one of the cubes.
3 A farmer says, "For every 2 horses in a field I need to put out 3 bales of hay."
a) How many bales of hay are needed for 8 horses?
b) How many bales of hay are needed for 3 horses?
c) If there are 18 bales of hay in a field, how many horses could the farmer put there?
(4)

Amir has a box of counters.
For every 5 red counters in the box there are 2 green counters.


Amir removes 21 red counters.
There are now the same number of red and green counters in the box.

How many green counters are in the box? Show all your workings.

6 The ratio of boys to girls in a class is $1: 3$
There are 15 girls in the class.
a) How many boys are in the class?
$\square$
b) How many children are in the class in total?
$\square$
7) The ratio of blue to green balloons is $2: 3$ There are 20 balloons altogether.
a) How many blue balloons are there?
b) How many green balloons are there?

8 Three points lie in a straight line.


- The distance from $A$ to $B$ is 3 times the distance from $B$ to $C$.
- The distance from $A$ to $B$ is 27 cm .

9 The ratio of $20 p$ coins to $5 p$ coins in a money box is $5: 2$
There are fifteen 20p coins.
How much money is in the box?

What is the distance from $A$ to $C$ ?


