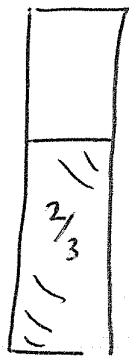3   Tom bought a full bag of coal.

After one week the bag was $\frac{2}{3}$ full.

During the next week he used $\frac{1}{4}$ of the remaining coal.

What fraction was left in the bag?

full
bag

after
1 week

next
week

$= \frac{1}{6}$

left

$\frac{1}{4}$ of $\frac{2}{3}$ used
in next week
$\frac{2}{12} = \frac{1}{6}$

$\frac{2}{3} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} = \frac{3}{6}$

Ans $\frac{1}{2}$

9   Rewrite $4 + x = 9 - y$ to make y the subject.

Give your answer in its simplest form.

$9 - y = 4 + x$

$(+y) \quad (+y)$

$9 = 4 + x + y$

$(-4) \quad (-4)$

$5 = x + y$

$(-x) \quad (-x)$

$5 - x = y$

Answer $y = \underline{5 - x}$ [2]

14 John has six shirts, eight ties and five cravats.

John is going out to dinner and he must choose a shirt **and** either a tie or a cravat to wear.

How many different combinations has John got to choose from?

6 shirts   8 ties   5 cravats

shirt & tie   OR   shirt & cravat

6   ×   8   6   ×   5

48   30

combinations   +   combinations

Answer ___78___ [3]