Fractions to Percentages

1. Isabelle has a range of fractions and percentages written on different cards.

When converted to percentages, she has created 3 different groups of cards which total 100% containing no more than 3 cards.

Card A	Card B	Card C	Card D	Card E	Card F	Card G
2%	16%	32%	$\frac{2}{5}$ 40%	2%	$\frac{3}{10}$ 30%	$\frac{2}{20}$ 10%

Card H	Card I	Card J	Card K	Card L	Card M	Card N
$\frac{17}{25}$ 68%	$\frac{2}{4}$ 50%	$\frac{17}{50}$ 34%	$\frac{1}{2}$ 50%	18%	10%	$\frac{50}{100}$ 50%

Explore the different possible combinations of cards she could have placed in each group. B,J,K B,J,N B,J,I C,L,N, C,L,K, C,L,I H,E,F H,A,F, etc.

Is it possible to make a group containing four or more cards to total 100%? FGMN FGMK FGMI

DP

2. Mr Payne has marked some tests and is trying to work out the final percentage scored by each student.

He says,

Each test is out of 100. Two students have managed to score a final percentage above 65%.

No.

Student	Test A	Test B	Total marks from both tests	Final %
Tabitha	66%	$\frac{19}{25}$	$\frac{142}{200}$	71%
Erin	$\frac{2}{5}$	$\frac{17}{50}$	$\frac{74}{200}$	37%
Daniel	$\frac{1}{2}$	68%	$\frac{118}{200}$	59%
Jacob	58%	$\frac{6}{10}$	$\frac{118}{200}$	59%
Serenity	$\frac{12}{20}$	70%	$\frac{130}{200}$	65%
Michael				

Complete the table and investigate whether Mr Payne is correct.

Michael has managed to score a final percentage that is higher than Jacob, but lower than Serenity. Explore what his results could be.

Any combination to total $\frac{120}{200}$ $\frac{122}{200}$ $\frac{124}{200}$ $\frac{126}{200}$ $\frac{128}{200}$

DP