Revision 1: Common Heuristics for P4&5

GUIDED EXAMPLE 1

Daniel had 10 pieces of one-dollar notes,
5 pieces of two-dollar notes and 2 pieces of five dollar notes.
In how many ways could he make up $10 using the notes he had?

GUIDED EXAMPLE 2

Mr Tan had a grandfather clock that chimes accordingly to the hours.
In addition, it also chimes once every half hour.
For example, it will chimes 3 times at 3am, and then at 330am,
it will chimes once. How many times will the clock chimes
between 915am and 545pm?

GUIDED EXAMPLE 3

A total of 100 pupils took part in Mathematics, Science and English competition.
They scored an average mark of 70.5 for all the three competitions.
The average mark for Mathematics, Science and English competition is 65, 77, 70
respectively and equal number of pupils who took part in Mathematics and Science quiz.
Find how many pupils took part in the English competition.

GUIDED EXAMPLE 4

Cindy baked some cakes.
She ate 2 cakes and divided the rest into 4 equal shares.
She gave 1 share and 3 more cakes to her neighbour.
She gave half the remaining share to her friends.
She was left with 12 cakes.
How many cakes did she bake at first?

GUIDED EXAMPLE 5 _____

There was a total of 276 beans in Bottle A, Bottle B and Bottle C.

Philip removed $\frac{1}{3}$ of the beans from bottle A, 16 beans from bottle B and added more beans to bottle C until the number of beans in it was doubled.

As a result, the ratio of the number of beans in bottle A to bottle B to bottle C was then 4:5:4. Find the number of beans in bottle B now.