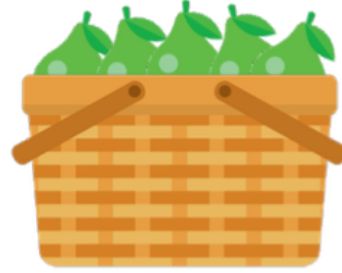


Make Equal Groups – Grouping

1. A farmer has two baskets of fruit. In one basket there are twenty-four apples and in the other basket there are forty pears. He wants to sort each type of fruit into equal groups.



Investigate the different ways that the two baskets of fruit can be sorted to make the same number of equal groups.

Various answers, for example: 8 groups of each fruit (3 apples in each apple group; 5 pears in each pear group).

On the way to market, six apples and four pears fall out of their baskets and are lost! How can the two baskets of fruit be sorted now to create the same number of equal groups? **Various answers, for example: 9 groups of each fruit (2 apples in each apple group; 4 pears in each pear group).**

DP

2. Asher is thinking about grouping numbers.



If you find all the possible ways to sort numbers into equal groups, a larger number will always have more ways than a smaller number.

8 can be sorted into 2, 4 or 8 equal groups, but 4 can only be sorted into 2 or 4 equal groups.

Find three pairs of numbers below thirty which prove Asher wrong.

Various answers, for example: 8 and 11, 12 and 22, 24 and 28

DP