**Solving Santa’s Equations**

Santa can’t remember how many presents he has placed in each sack on his sleigh. All he does know is that each sack has the same number of gifts inside.

The elves organise Christmas Eve’s journey into different parts as Santa’s sleigh can’t carry all the gifts at once.

Help Santa work out how many gifts are in each sack so that he doesn’t throw one away by mistake and show Santa how you worked it out using algebra.

***Journey 1 – total gifts = 32:***

Sack (2).WMF Sack (2).WMF Sack (2).WMF Gift.WMF Gift.WMF

Three sacks of gifts plus two gifts that are going separately.

***Journey 2 – total gifts = 47:***

Sack (2).WMF Sack (2).WMF Gift.WMF Gift.WMF Gift.WMF

Two sacks of gifts plus three gifts that are going separately.

***Journey 3 – total gifts = 33:***

Sack (2).WMF Sack (2).WMF Sack (2).WMF Sack (2).WMF Gift.WMF

Four sacks of gifts plus one gift that is going separately.

***Journey 4 – total gifts = 33:***

Sack (2).WMF Sack (2).WMF Gift.WMF

Sack (2).WMF Sack (2).WMF Gift.WMF

Sack (2).WMF Sack (2).WMF Gift.WMF

Three lots of two sacks of gifts plus one gift that is going separately.

***Journey 5:***

The final two journeys are a bit different because Santa only knows that both journeys have the same number of presents in both loads.

Load 1: Sack (2).WMF Sack (2).WMF Sack (2).WMF Gift.WMF

Load 2: Sack (2).WMF Gift.WMF Gift.WMF Gift.WMF Gift.WMF Gift.WMF