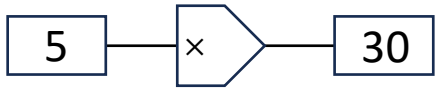
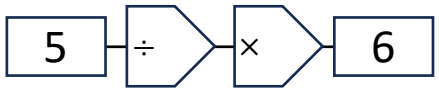
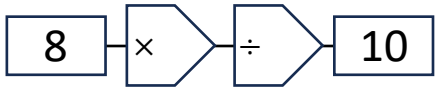
Direct Proportion

1. Factual recall

Complete the function machines







2. Carry out a routine procedure

The following tables follow a direct proportion, fill in the missing values

x	0	2	4		12
y		8		24	

x	1	2	5		11
y			15	21	

x	2	3		9	
y			21	27	42

3. Classify some mathematical object

Tick the scenarios that follow a direct proportion

The number of sweets bought at a shop and the price.	
The ages of a brother and a sister.	
The number of builders and the time to complete a building	
The speed of a runner and the distance the runner travels.	

4. Interpret a situation or answer

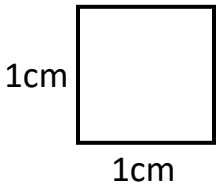
8 pens at a shop cost £2.40.
Calculate the cost of…

a) 16 pens
b) 36 pens
c) 111 pens

5. Prove, show, justify

The following table represents the length and perimeter of a square. By filling in the table show that the length of a square is directly proportional to the perimeter of the square.

l	1	2	5	10	20
P					



6. Extend a concept

Now fill in this table for the area of the squares.

l	1	2	5	10	20
A					

Is the area of the square directly proportional to its length?

7. Construct an instance

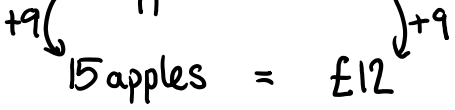
Construct 3 different ways of solving the following problem.

6 cans of soda cost £3.60, find the price of 20.

8. Criticise a fallacy

A student answers the following question.

6 apples cost £3.
Find the price of 15 apples.



Is the student correct? Explain.