

STEP 1: SINGLE FUNCTION MACHINES

Which of these will give the largest value?

Input = 32.5

$$\square \longrightarrow \boxed{\times 30} \longrightarrow \square$$

$$\square \longrightarrow \boxed{\text{cube}} \longrightarrow \square$$

$$\square \longrightarrow \boxed{+ 15000} \longrightarrow \square$$

$$\square \longrightarrow \boxed{+ 20^2} \longrightarrow \square$$

$$\square \longrightarrow \boxed{+ 20\,000} \longrightarrow \square$$

STEP 2: FIND THE INPUT GIVEN THE OUTPUT

Find the input given the output:

$$\square \longrightarrow \boxed{\times 20} \longrightarrow \boxed{200}$$

$$\square \longrightarrow \boxed{\div 9} \longrightarrow \boxed{300}$$

$$\square \longrightarrow \boxed{\text{Squared}} \longrightarrow \boxed{400}$$

$$\square \longrightarrow \boxed{\div 2.5} \longrightarrow \boxed{500}$$

$$\square \longrightarrow \boxed{+ 300} \longrightarrow \boxed{600}$$

STEP 3: USE LETTERS TO GENERALISE

1) $3 \times a =$

2) $b \div 3 =$

3) $c - \square = c - 3$

4) $\square \times d = 5d$

5) $e \times f =$

6) $g \times g =$

7) $3h \times 5 =$

are $3y$ and $3+y$
the same? Explain
your answer:

STEP 4: SINGLE FUNCTION MACHINES ALGEBRA

$$\boxed{2a} \longrightarrow \square \longrightarrow \square$$

$$\boxed{7a} \longrightarrow \square \longrightarrow \square$$

$$\boxed{a+2} \longrightarrow \boxed{\times 3} \longrightarrow \square$$

$$\boxed{3a-2} \longrightarrow \square \longrightarrow \square$$

$$\boxed{a/3} \longrightarrow \square \longrightarrow \square$$