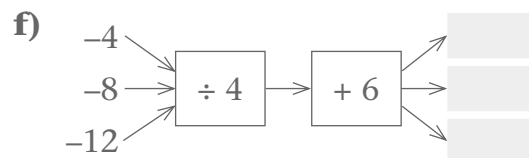
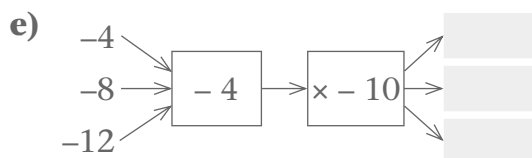
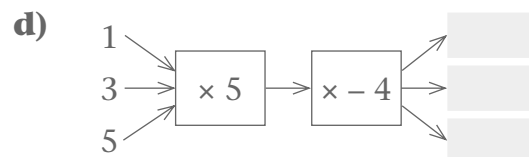
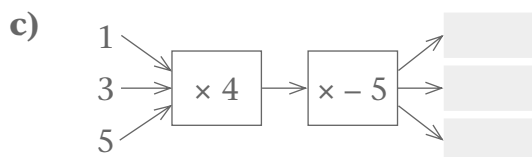
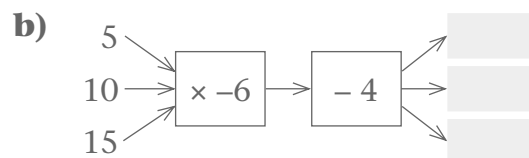
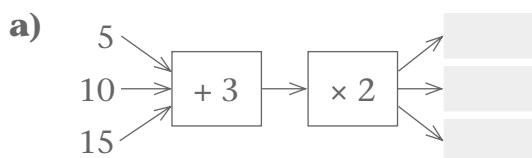


Functions and relationships

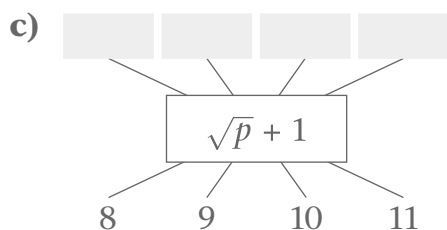
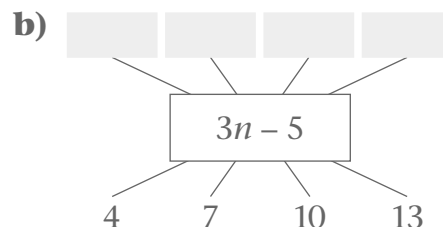
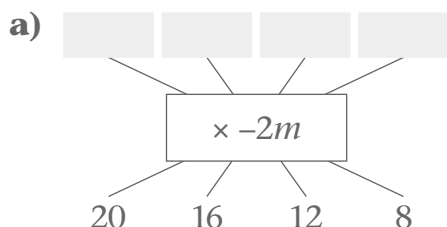
Input and output values

1. Calculate the output values in the flow diagrams.



2. Which pair in Question 1 gives the same output? Why?

3. Calculate the input values in the flow diagrams.



4. Calculate the missing output values in the two tables.

a) Table A

Input	-4	-2	0	2	4	6
Output	16			4		36

b) Table B

Input	-5	-4	-3	-2	-1	0
Output	51		31	21		1

5. Write down in words the rule for each of the tables in Question 4.

Table A: The output value is equal to

Table B: The output value is equal to

Functions and relationships

Equivalent forms

Relationship P

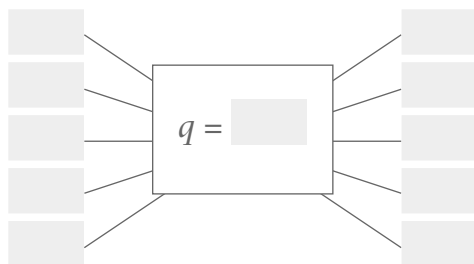
1. Input for P: the first five prime numbers

Rule for P: input values multiplied by 4; subtract 20

- a) List the input values,
 $(p) = \{ \quad ; \quad ; \quad ; \quad ; \quad \}$

- b) Write the rule in the form, $q = \quad$

- c) Complete the flow diagram.



- d) Draw up a table for Relationship P.

p					
q					

Relationship S

2. Relationship S is represented in a table.

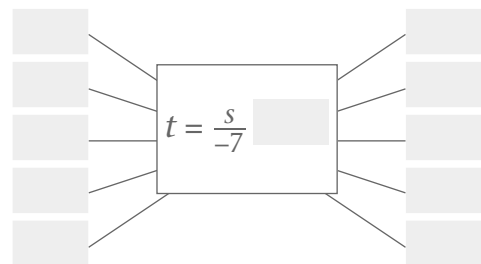
s	7	14	21	28	35
t	6	5	4	3	2

- a) List the input and output values for S.

Input (s) = $\{ \quad ; \quad ; \quad ; \quad ; \quad \}$

Output (t) = $\{ \quad ; \quad ; \quad ; \quad ; \quad \}$

- b) Complete the flow diagram.



- c) Describe in words.

i) Input values: $\quad$

ii) Output values: $\quad$

3. Properties of Relationship X.

Input values: natural numbers less than 6.

Output values: first five positive cube numbers

- a) List the input values, $(x) = \{ \quad \}$

- b) List the output values, $(y) = \{ \quad \}$

- c) Write down the rule in terms of x and y $\quad$

4. Properties of Relationship K. Input values: multiples of 3 between 10 and 25

Rule: Output value = double the input value; subtract 4

- a) List the input values, $(k) = \{ \quad \}$

- b) Write down the rule in terms of k and l $\quad$

- c) List the output values, $(l) = \{ \quad \}$