***Building and Using Input Output Diagrams*** USE A SEPARATE SHEET OF PAPER AS NEEDED

1. In each case build an input output-diagram and use it to find the outputs for x=-4, x=0, x=3, x=8

|  |  |
| --- | --- |
| a) | b)  |
| c) | d) |
| e) | f) |
| g) | h) |
| i)  | j)  |

1. Given the input-output diagram, find the inputs for the given outputs.
Then write an equation that is represented by the input output diagram.

+4

|  |  |
| --- | --- |
| a)5-148Equation: | b)5-148Equation: |
| c) 11  6  3 -2Equation: | d)   16  9  4 1 Equation:  |
| e) 1  0  -3 -8Equation: | f)  0 5  12 21Equation: |

1. Complete the values of the input output diagram by working outwards. Write an equation.

|  |  |
| --- | --- |
| a) -2  -1 0 1 2Equation: | b) -2  -1 0 1 2Equation: |
| c) -2  -1 0 1 2Equation: | d)  -2  -1 0 1 2Equation: |

1. Given the values, complete the input-output diagram. Write an equation to match.

|  |  |
| --- | --- |
| a) 3 -1 1 5 4 0 0 4 5 1 1 5 6 2 4 8 7 3 9 13Equation: | b) -7 -2 4 -8 -6 -1 1 -2 -5 0 0 0 -4 1 1 -2 -3 2 4 -8Equation: |
| c)  1 1 -1 -3 4 2 -2 -4 9 3 -3 -5 16 4 -4 -6Equation: | d) -3 3 0 0 -4 4 1 1 -7 7 4 2 -12 12 9 3 Equation: |