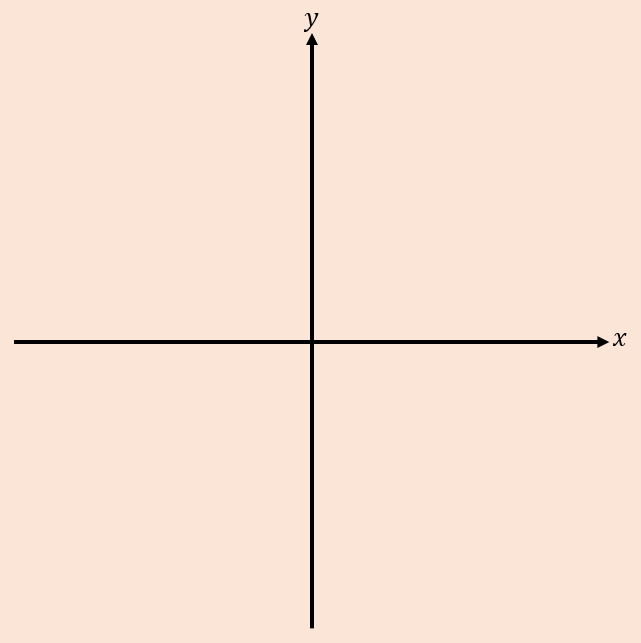
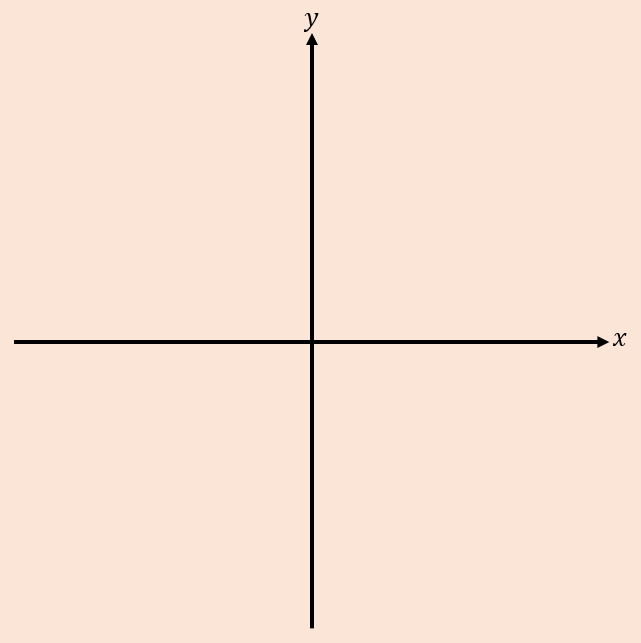
**2A The |Modulus| Function**

1. The function f(x) is defined

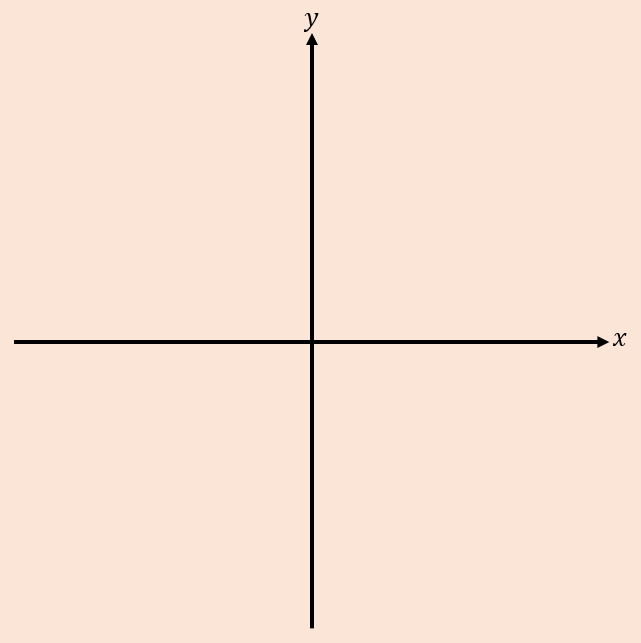
find:

1. f(5)
2. -1)

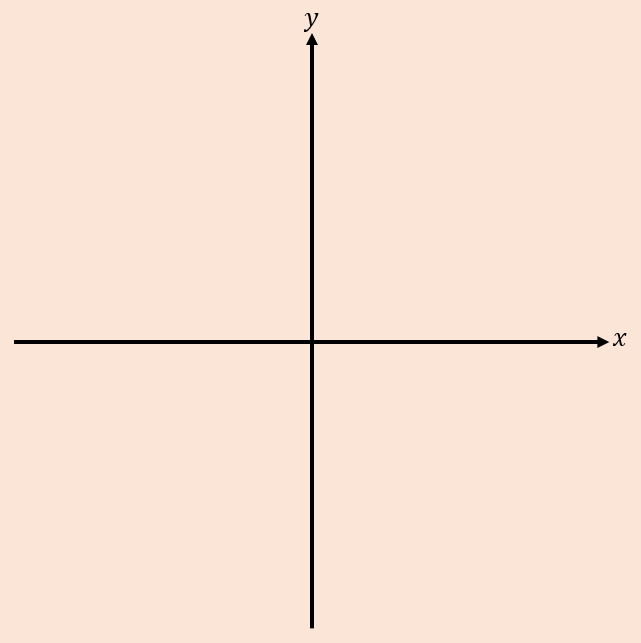
1. a) Sketch the graph of



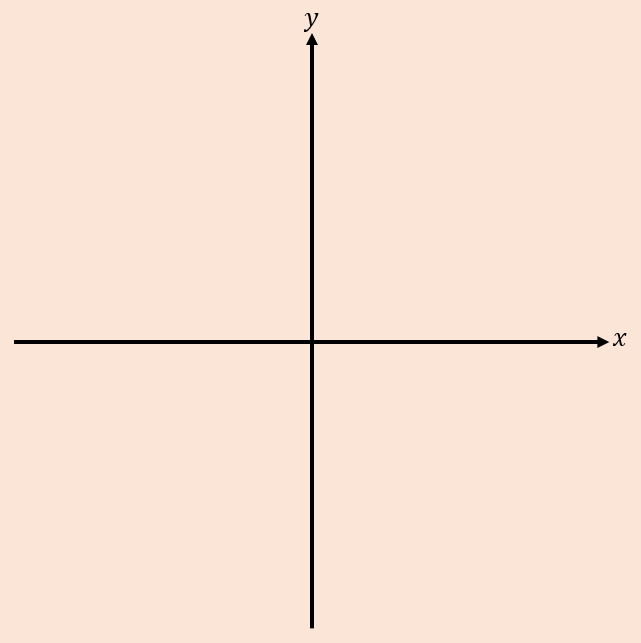
1. Solve the equation



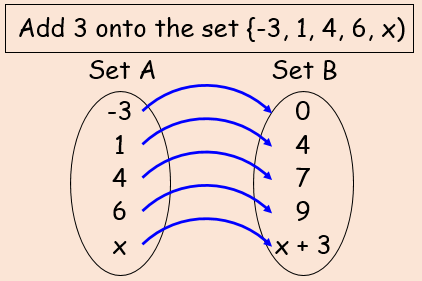
1. Solve the equation

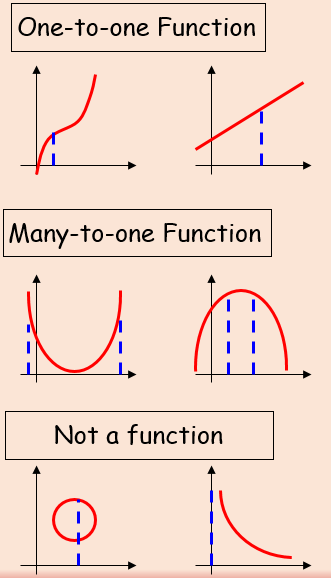
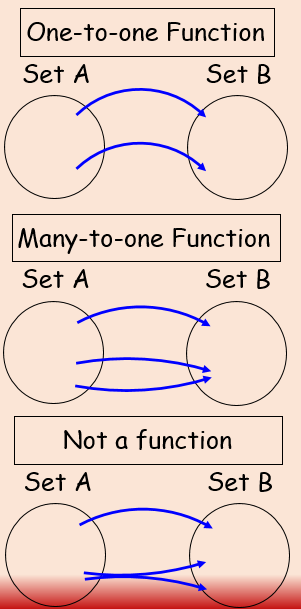


1. Solve the inequality



**2B Part 1 Domains & Ranges**

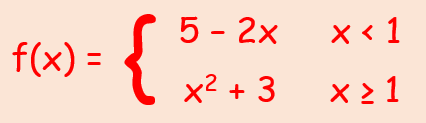




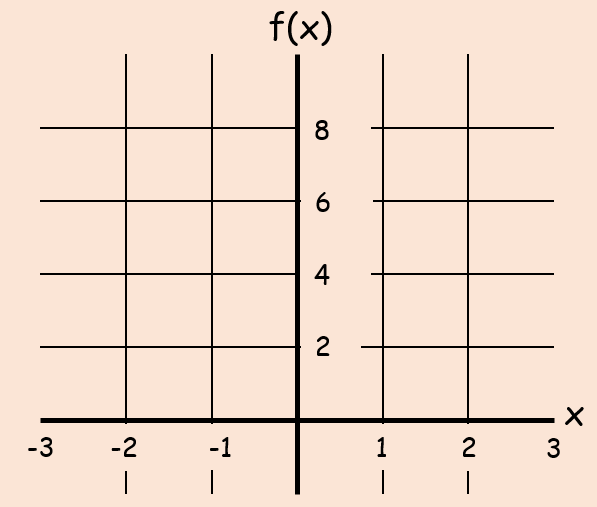
1. Find the range of the following function, and state if it is one-to-one or many-to-one.
2. f(x) = 3x – 2, domain {x = 1, 2, 3, 4}
3. f(x) = 3x – 2, {x = 1, 2, 3, 4}
4. g(x) = x2, domain {x є R, -5 ≤ x ≤ 5}
5. g(x) = x2, {-5 ≤ x ≤ 5}
6. h(x) = 1/x, domain {x є R, 0 < x ≤ 3}
7. h(x) = 1/x, {x є R, 0 < x ≤ 3}

**2B Part 2 Solving Equations with Functions**

1. Given that the function g(x) = 2x2 + 3, find;
2. the value of g(3)
3. the value(s) of a such that g(a) = 35
4. the range of the function
5. The function f(x) is defined by:



1. Sketch f(x) stating its range



1. Find the values of a such that f(a) = 19

**2C Composite Functions**

1. Given:

f(x) = x2 g(x) = x + 1

Find:

1. fg(x)
2. gf(x)
3. Given:

f(x) = 3x + 2 g(x) = x2 + 4

Find:

1. fg(x)
2. gf(x)
3. f2(x)
4. The values of b so that fg(b) = 62
5. The functions and are defined by:
6. Find
7. Solve

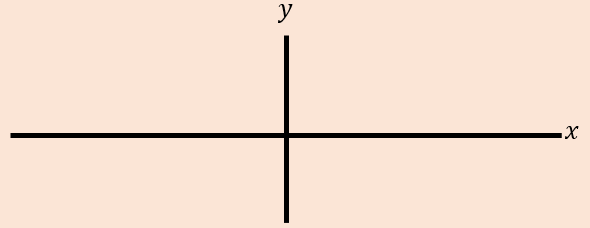
**2D Inverse Functions**

1. Find the inverse of the function:
2. The function:

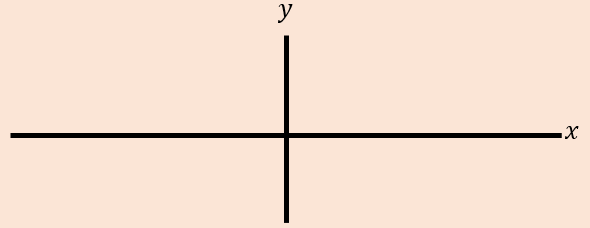
1. State the range of
2. Find the function and state its domain and range
3. Sketch and and the line
4. The function is defined by:
5. Find
6. Sketch and state its domain
7. Solve the equation

**2E Modulus Graphs**

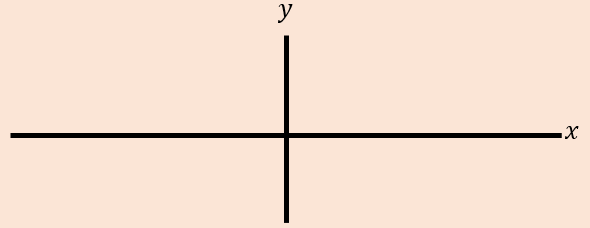
1. Given that:
2. Sketch



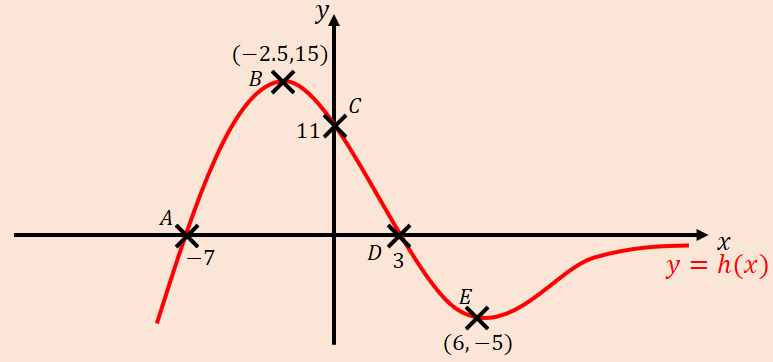
1. Sketch



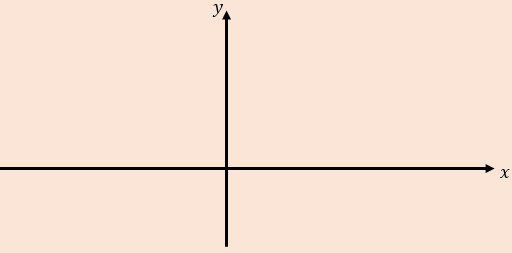
1. Sketch

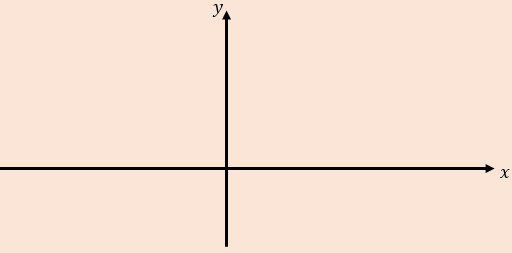


1. The diagram shows the graph of , with five points labelled.



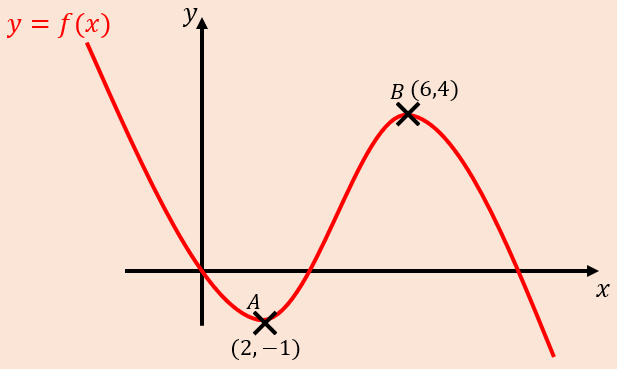
Sketch each of the following graphs, labelling points corresponding to , , , and , as well as any intersections with the axes.



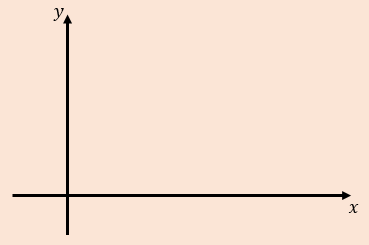


**2F Multiple Graphical Transformations**

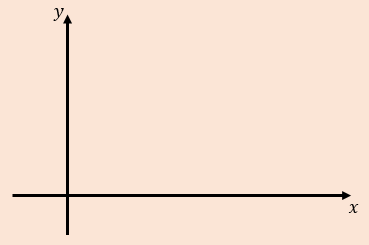
1. The diagram shows the sketch of .



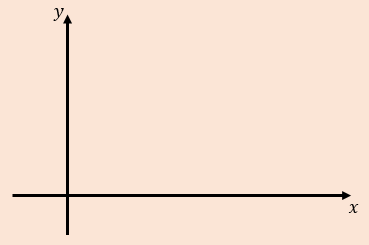
1. Sketch the graph of



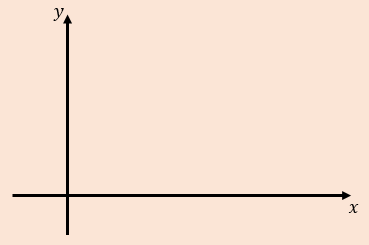
1. Sketch the graph of



1. Sketch the graph of

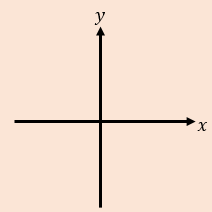
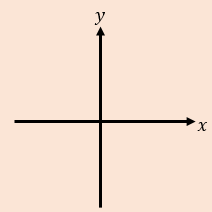
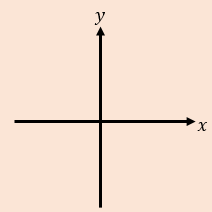


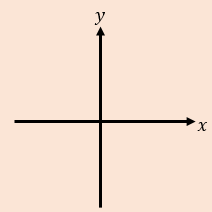
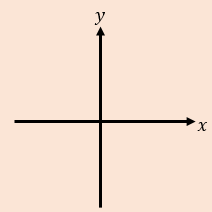
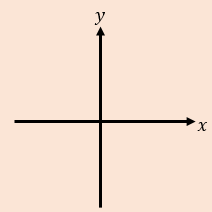
1. Sketch the graph of



1. Given that:

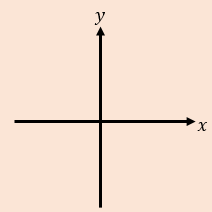
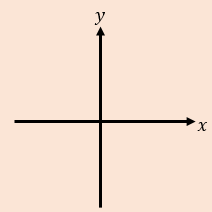
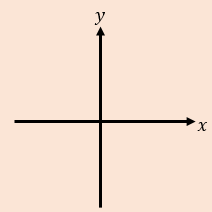
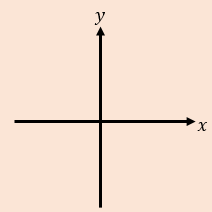
Sketch the graphs of:



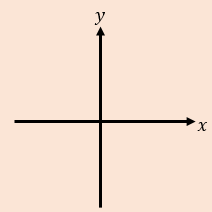


**2G Solving Modulus Equations**

1. Given the function:
2. Sketch the graph of the function

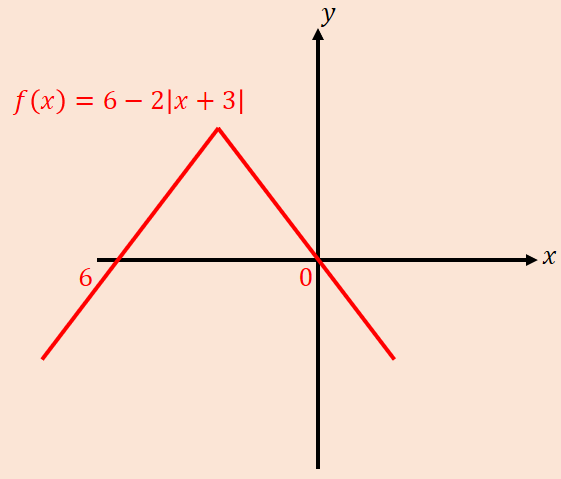


1. State the range of the function
2. Solve the equation



1. The function is defined by:

A sketch of the graph is shown.



1. State the range of
2. Explain why does not exist
3. Solve the inequality

