12 Here are six graphs.

Graph **A**	Graph **B**	Graph **C**

Graph **D**	Graph **E**	Graph **F**

Write down the letter of the graph of

(a) $y = \dfrac{10}{x^2}$

....
(1)

(b) $y = x - 3 + 3x^2 - x^3$

....
(1)

(c) $y = -\dfrac{3}{x}$

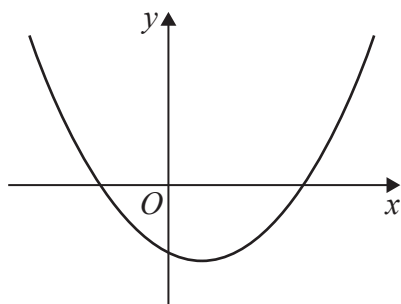...
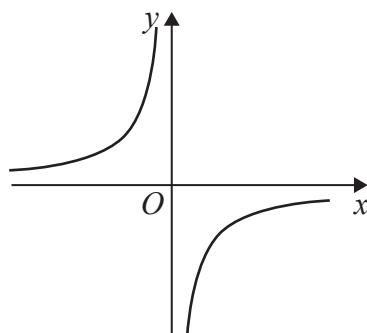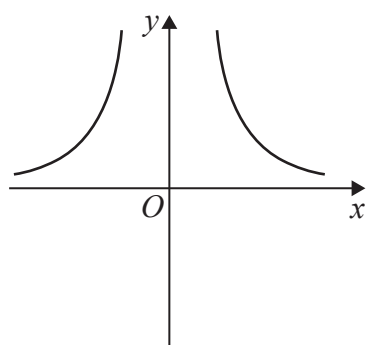(1)

(Total for Question 12 is 3 marks)

15 Here are six graphs.
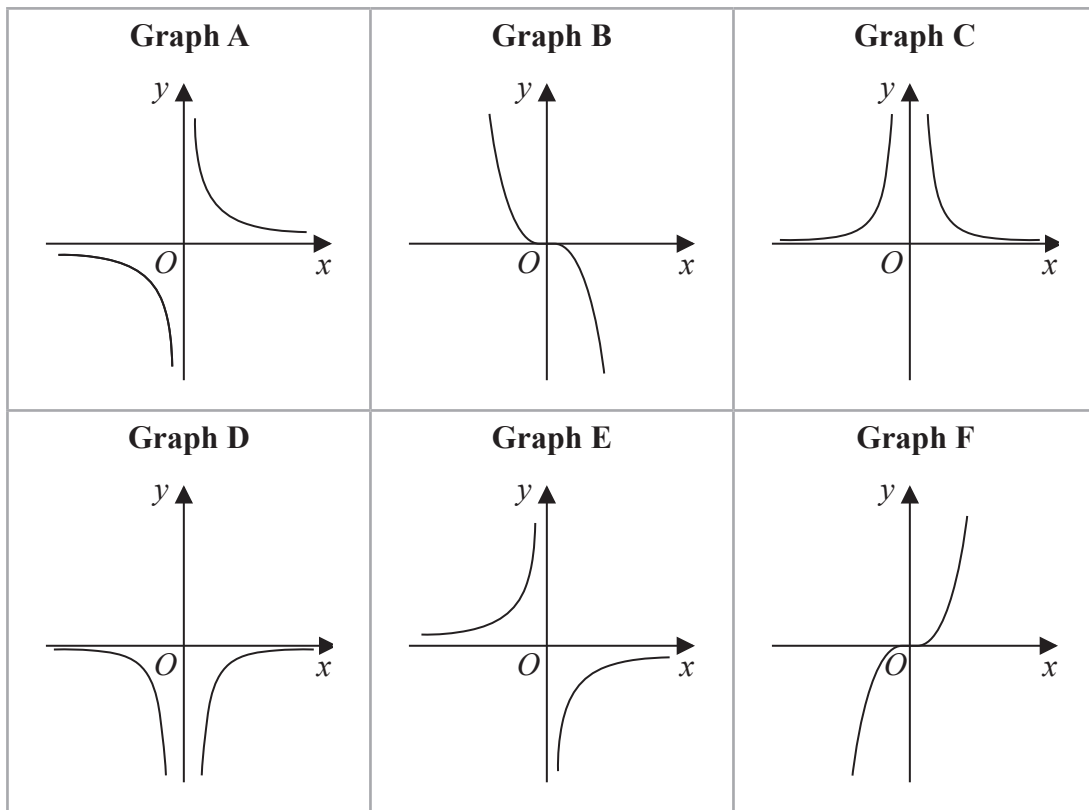
Graph A	Graph B	Graph C

Graph D	Graph E	Graph F

Complete the table below with the letter of the graph that could represent each given equation.

Write your answers on the dotted lines.

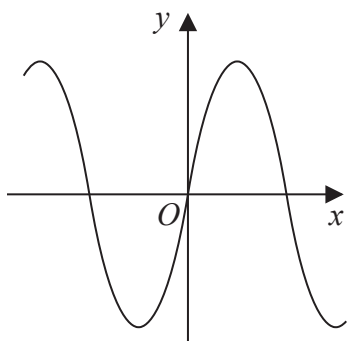| Equation	Graph
$y = \dfrac{2}{x^2}$	....
$y = -\dfrac{1}{2}x^3$	....
$y = -\dfrac{5}{x}$	....

(Total for Question 15 is 3 marks)

16 Here are nine graphs.

Graph A

Graph B
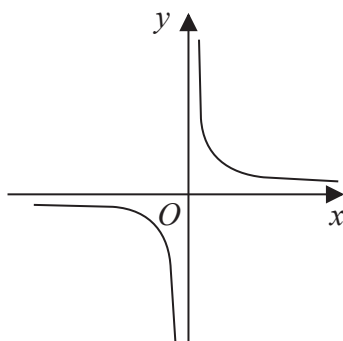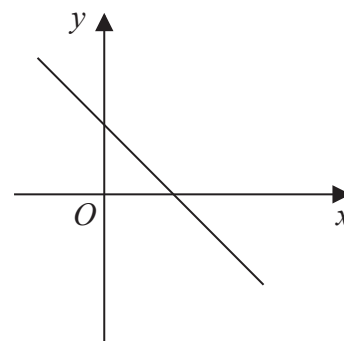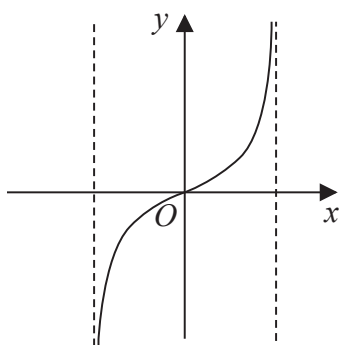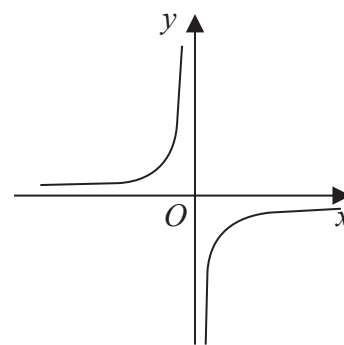
Graph C

Graph D

Graph E

Graph F

Graph G
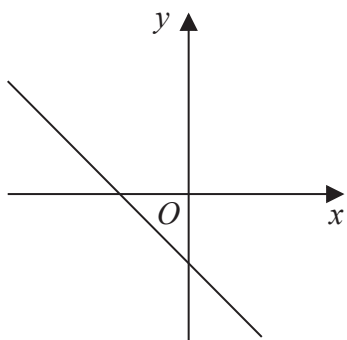
Graph H
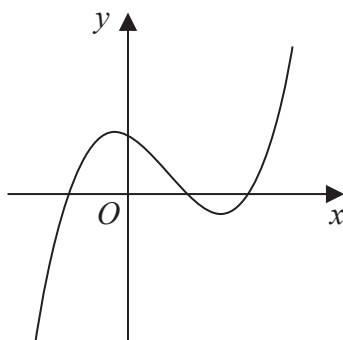
Graph I
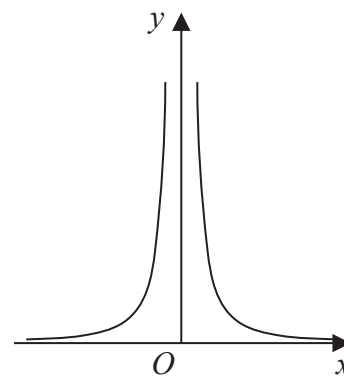
Complete the table below with the letter of the graph that could represent each given equation. Write each answer on the dotted line.

Equation	Graph
$y = -2x + 3$	....
$y = -\dfrac{1}{x}$	....
$y = \tan x°$	....
$y = (x + 1)(x - 1)(x - 2)$	....

(Total for Question 16 is 3 marks)

16 Here are six graphs.

A
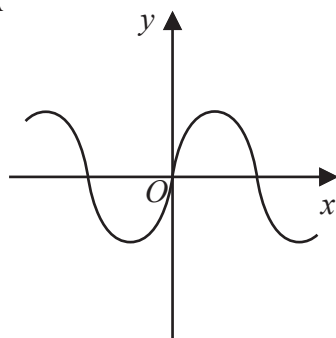
B

C

D
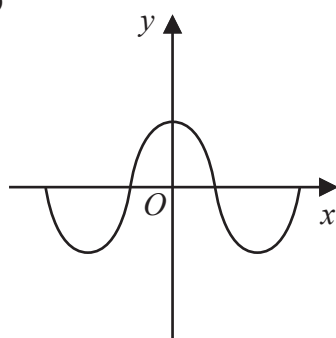
E

F

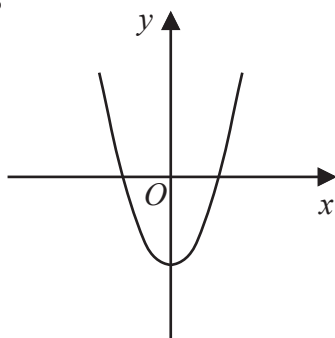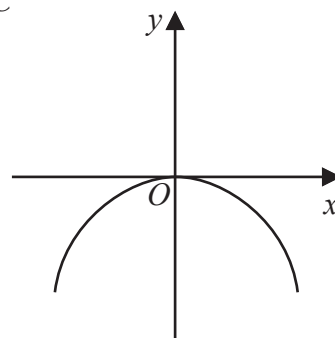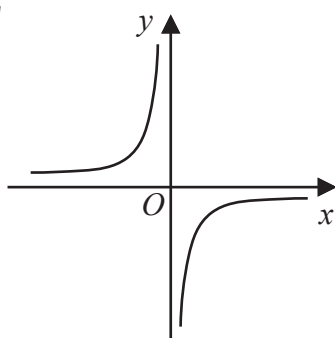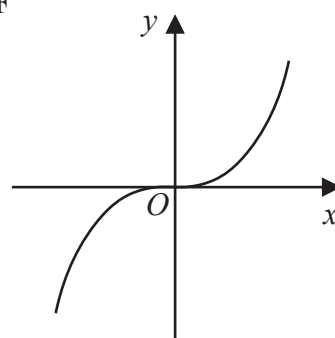Write down the letter of the graph that could have the equation

(i) $y = -\dfrac{1}{x}$

....

(1)

(ii) $y = \sin x°$

....

(1)

(Total for Question 16 is 2 marks)

18 Here are 6 graphs.

Graph A	Graph B	Graph C

Graph D	Graph E	Graph F
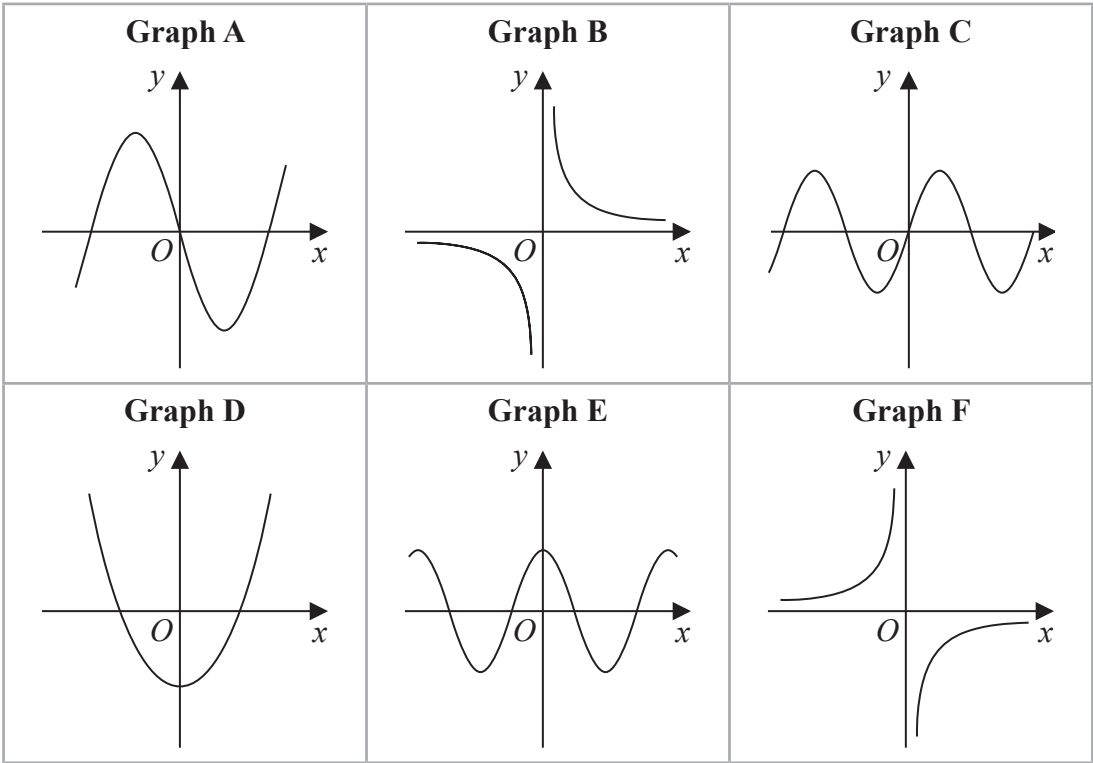
Complete the table below with the letter of the graph that could represent each given equation.

Write your answers on the dotted lines.

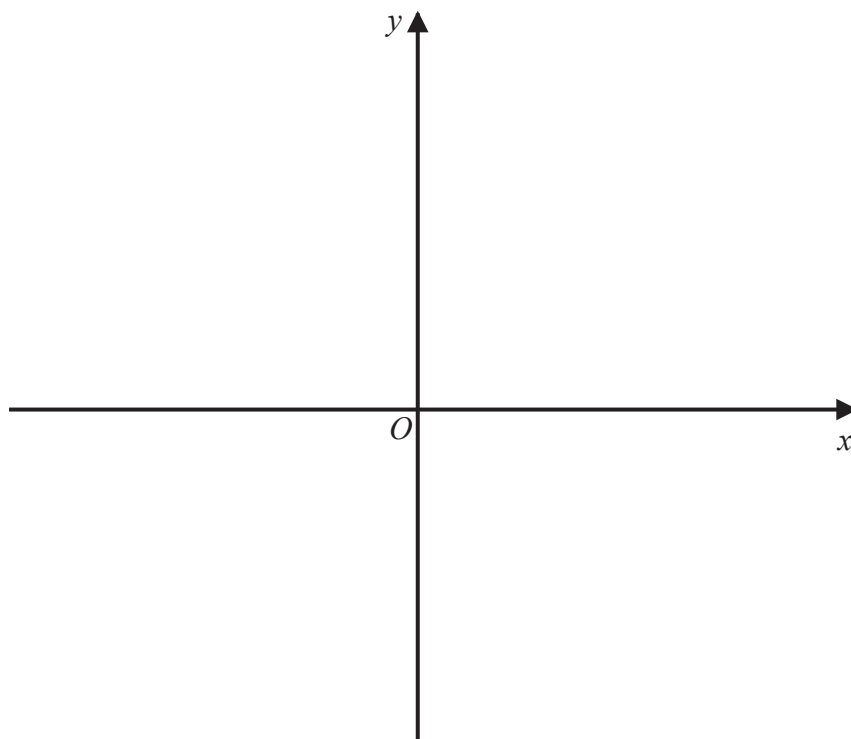| Equation	Graph
$y = \sin x$	....
$y = -\dfrac{3}{x}$	....
$y = 4x^3 - 5x$	....

(Total for Question 18 is 3 marks)

20 The curve **C** has equation $y = 4(x - 1)^2 - a$ where $a > 4$

Using the axes below, sketch the curve **C**.
On your sketch show clearly, in terms of a,

(i) the coordinates of any points of intersection of **C** with the coordinate axes,

(ii) the coordinates of the turning point.

(Total for Question 20 is 4 marks)