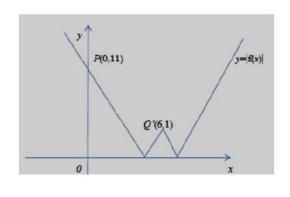
Question 1

(a)



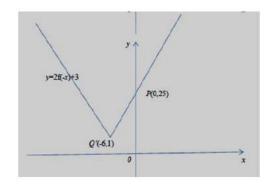
'W' Shape

B1

(0, 11) and (6, 1) B1

(2)

b)



'V' shape B1

> (-6,1)B1

(0,25)B1

(3)

(2)

(4)

c)

One of
$$a = 2$$
 or $b = 6$

$$a = 2$$
 and $b = 6$

B1

B1

(2)

(7 marks)

Question 2

Either
$$k > 13$$
 or $k = 3$
Both $k > 13$ $k = 3$

Β1 В1

(b)

Smaller solution:
$$2(5-x)+3=\frac{1}{2}x+10 \Rightarrow x=\frac{6}{5}$$

M1 A1

Larger solution: $-2(5-x)+3=\frac{1}{2}x+10 \Rightarrow x=\frac{34}{3}$

M1 A1

(c)

B₁B₁

(2)

(8 marks)