**Consolidation: answers**

# Question 1

**Step 1: Integrate each term.**

Write the integration calculation, including the limits.

**Step 2: Apply definite limits.**

To find the area, we need to evaluate the integral at each limit, and , and find the difference.

At :

At :

This means that the integration calculation is:

# Question 2

**Step 1: Integrate each term.**

Write the integration calculation, including the limits.

**Step 2: Apply definite limits.**

To find the area, we need to evaluate the integral at each limit, and , and find the difference.

At :

At :

This means that the integration calculation is:

The result is negative because the area is below the x-axis.

# Question 3

**Step 1: Integrate each term.**

Write the integration calculation, including the limits.

**Step 2: Apply definite limits.**

To find the area, we need to evaluate the integral at each limit, and , and find the difference.

At :

At :

This means that the integration calculation is: