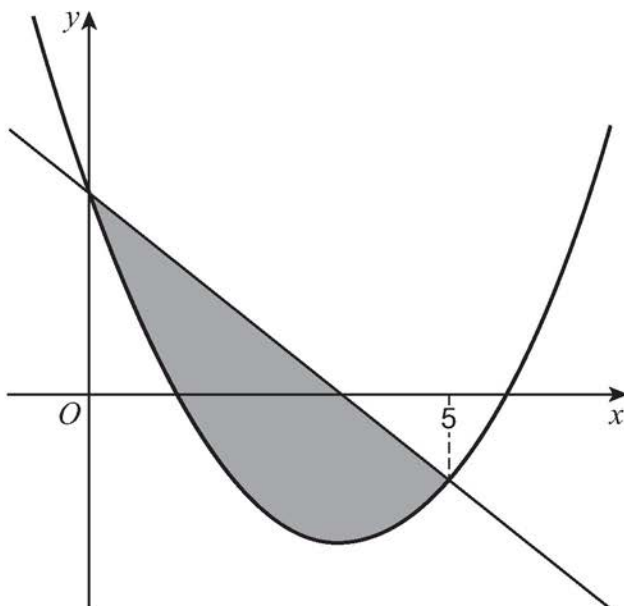


2

The shaded region, shown in the diagram below, is defined by

$$x^2 - 7x + 7 \leq y \leq 7 - 2x$$



Identify which of the following gives the area of the shaded region.

Tick (✓) **one** box.

[1 mark]

$$\int (7 - 2x) dx - \int (x^2 - 7x + 7) dx$$

$$\int_0^5 (x^2 - 5x) dx$$

$$\int_0^5 (5x - x^2) dx$$

$$\int_0^5 (x^2 - 9x + 14) dx$$