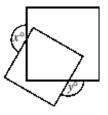




3. The diagram shows overlapping squares. What is the value of x + y?

A 270 B 300 C 330

D 360 E more information needed



0673



©UKMT

3. A The overlapping region of the two squares is bounded by a pentagon. Two of the interior angles of this pentagon are vertically opposite the given angles of size  $x^{\circ}$  and  $y^{\circ}$ , whilst the other three interior angles are all right angles. So  $x + y + 3 \times 90 = 540$ , that is x + y = 270.

(The diagram on the right also demonstrates that x + y = 270.)

