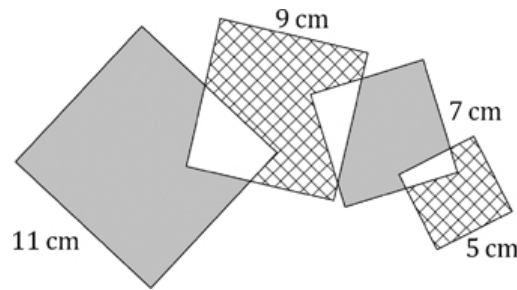




Solution to problem # 660

PROBLEM:

The diagram shows four overlapping squares that have sides of lengths 5 cm, 7 cm, 9 cm and 11 cm. What is the difference between the total area shaded grey and the total hatched area?



SOLUTION: The combined grey and white areas form a square of side 11 and a square of side 7, a total area of 170. Similarly, the combined hatched and white areas form a square of side 9 and a square of side 5, a total area of 106. As the white area is included in both these totals, the difference between the totals will be the difference between the grey area and the hatched area. Hence the correct answer is $170 - 106 = 64$.