7

$$A = 2^3 \times 3^2 \times 5^4$$
$$B = 2^2 \times 3^3 \times 5^n$$

Given that the Lowest Common Multiple (LCM) of A and B is $3\,375\,000$

find the value of the integer n.
Show your working clearly.

$n =$ .....

(Total for Question 7 is 2 marks)