51 Let $B = 1, 3, 5$. What is

(a) $\not\in(B + B)$

(b) $\not\in(B \times 2)$

(c) $\not\in(B \times B)$

(d) $\not\in(B^2)$

After trying the question, scroll down to the solution.

51 Let $B = 1, 3, 5$. What is

(a) $¢(B+B)$

§ $B+B = (1, 3, 5)+(1, 3, 5) = 2,4,6,4,6,8,6,8,10 = 2,4,6,8,10$

So $¢(B+B) = ¢(2, 4, 6, 8, 10) = 5$

(b) $¢(B\times 2)$

§ $B\times 2 = (1, 3, 5)\times 2 = 2,6,10$

So $¢(B\times 2) = ¢(2, 6, 10) = 3$

(c) $¢(B\times B)$

§ $B\times B = (1, 3, 5)\times(1, 3, 5) = 1,3,5,3,9,15,5,15,25 = 1,3,5,9,15,25$

So $¢(B\times B) = ¢(1, 3, 5, 9, 15, 25) = 6$

(d) $¢(B^2)$

§ $B^2 = (1, 3, 5)^2 = 1,9,25$

So $¢(B^2) = ¢(1, 9, 25) = 3$