

Answer on Question #57315 – Math – Algebra

Question

The ordered pairs (1, 1), (2, 4), (3, 9), (4, 16), and (5, 25) represent a function. What is a rule that represents this function?

A. $y = x^2$

B. $y = 2x$

C. $y = x + 2$

D. $y = 2x$

Solution

Pairs (1, 1) and (2, 4) satisfies all rules in the list: $y = x^2$, $y = 2x$, $y = x + 2$, $y = 2x$.
But the pair (3, 9) satisfies the only rule $y = x^2$, because $9=3^2$.

So do pairs (4, 16) and (5, 25), because $16=4^2$ and $25=5^2$.

The rule that represents this function is $y = x^2$.

Answer: A. $y = x^2$.