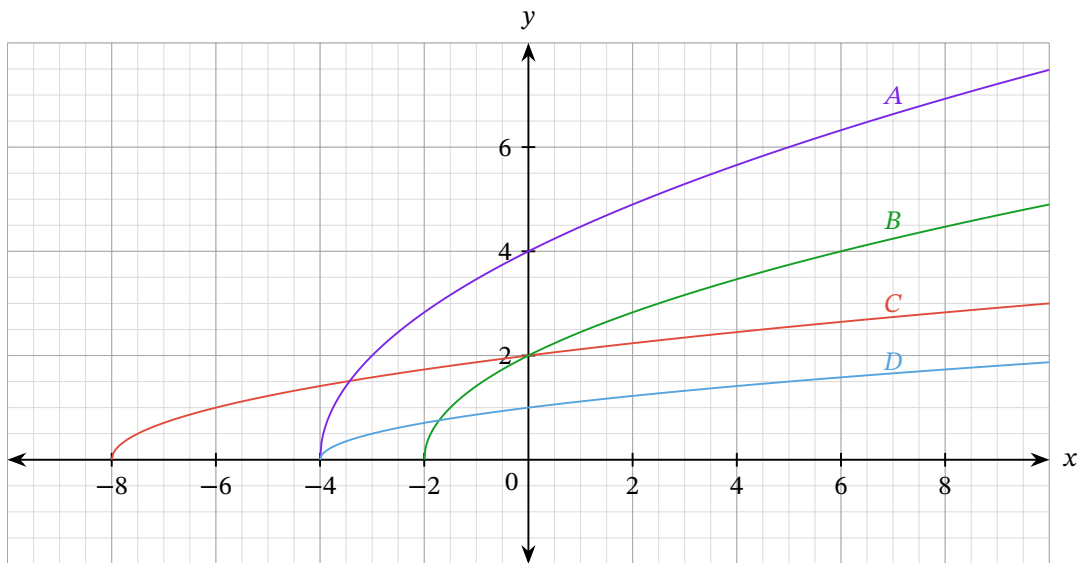


Worksheet: Transformations of a Square Root Function



Q1: Consider the function $g(x)$ that has been obtained by dilating $f(x) = \sqrt{x + 4}$ in the horizontal direction by a factor of $\frac{1}{2}$.

► Which of the following is the graph of $y = g(x)$?



- A C
- B A
- C D
- D B

► What is the equation of $g(x)$?

A $g(x) = \sqrt{\frac{x}{2} + 4}$

B $g(x) = \sqrt{2x + 4}$

C $g(x) = 2\sqrt{x + 4}$

D $g(x) = \frac{1}{2}\sqrt{x + 4}$