

Answer on Question #45791 – Math – Calculus

The transformation from f to g represents a _____ stretch.

f as a function of x is equal to the square root of x and g as a function of x is equal to the square root of quantity 0.4 times x

Solution.

$$f(x) = \sqrt{x},$$

$$g(x) = \sqrt{0.4x} = \sqrt{0.4}\sqrt{x} \approx 0.63\sqrt{x}.$$

Thus, the transformation from f to g represents a stretch in the x direction by a factor of $\frac{1}{\sqrt{0.4}} \approx 1.59$.

