

Match each transformation with the correct function.

- _____ 10) translated up 3 units
- _____ 11) translated left 3 units
- _____ 12) translated right 3 units
- _____ 13) vertical stretch by a factor of 3
- _____ 14) translated down 1 unit
reflection across the x-axis
vertical stretch by a factor of 2
- _____ 15) translated left 1 unit
vertical compression by a factor of $\frac{1}{2}$
- _____ 16) vertical stretch by a factor of 2
reflection across the x-axis
- _____ 17) translated up 1 units
translated right 3 units
vertical compression by a factor of $\frac{1}{2}$

A. $y = (x + 3)^2$

B. $y = x^2 + 3$

C. $y = (x - 3)^2$

D. $y = 3x^2$

E. $y = x^2 - 3$

F. $y = \frac{1}{2}(x - 3)^2 + 1$

G. $y = -2x^2 - 1$

H. $y = \frac{1}{2}(x + 3)^2 + 1$

I. $y = \frac{1}{2}(x + 1)^2$

J. $y = -2x^2$

K. $y = -2(x - 1)^2$