

Families of Functions & Their Graphs

1. Sketch the graphs of the following functions on the same pair of axes.

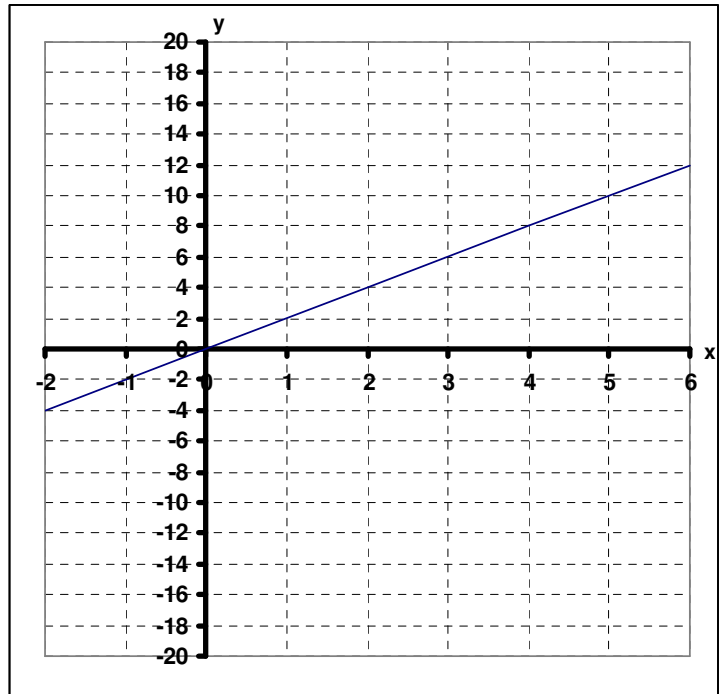
a. $y = 2x$ (Graph is shown.)

b. $y = 2x + 4$

c. $y = 2(x - 3)$

d. $y = -2x$

e. $y = 0.5x$



2. Sketch the graphs of the following functions on the same pair of axes.

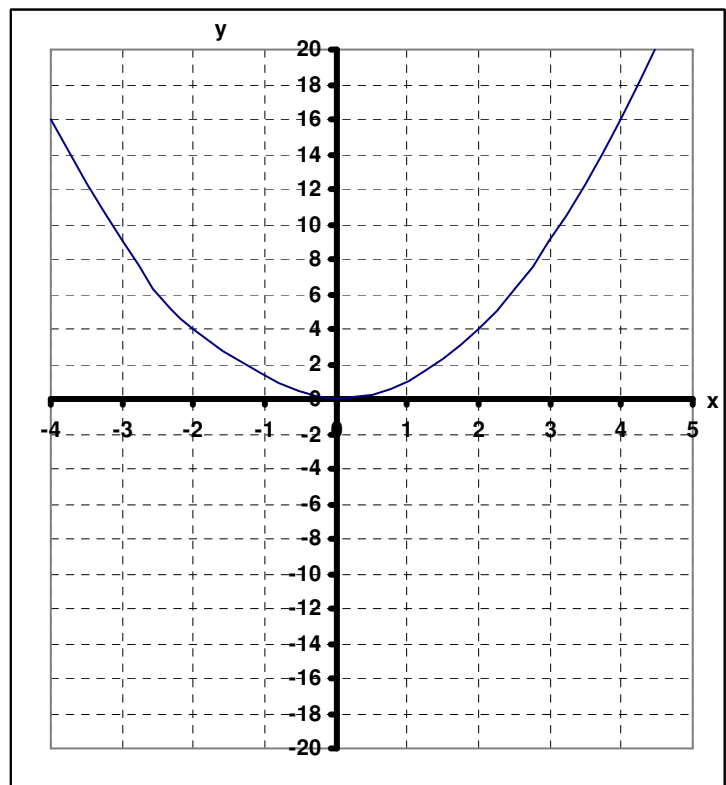
a. $y = x^2$ (Graph is shown)

b. $y = x^2 - 4$

c. $y = (x - 2)^2$

d. $y = -x^2$

e. $y = 2x^2$



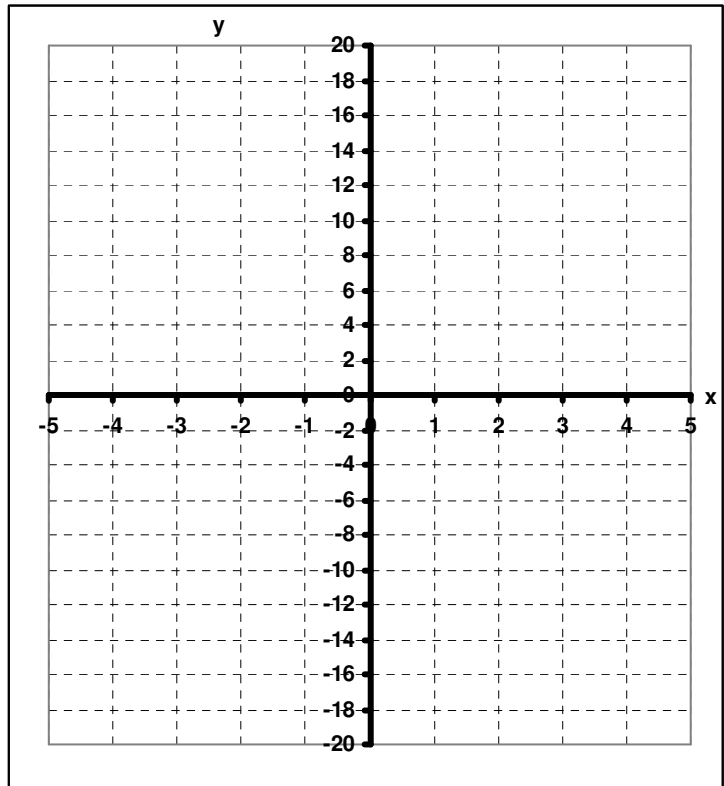
3. Sketch the graphs of the following functions on the same pair of axes.

a. $y = \frac{8}{x}$

b. $y = \frac{8}{x} + 3$

c. $y = \frac{8}{x+2}$

d. $y = \frac{-8}{x}$



3. Sketch the graphs of the following functions on the same pair of axes.

a. $y = x^2$ (Graph is shown)

b. $y = (x + 2)^2$

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

g. $y = (x + 2)^2 - 3$

