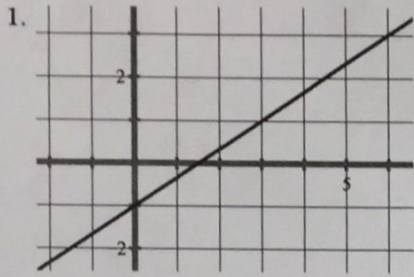
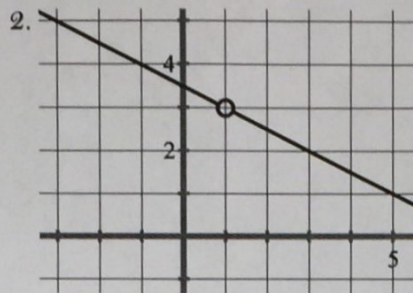


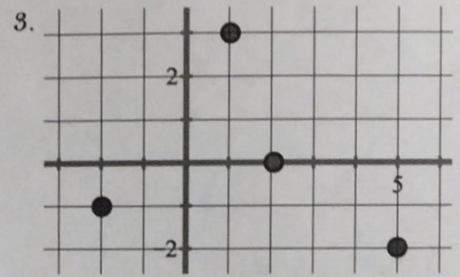
Find the domain and range for each graph.



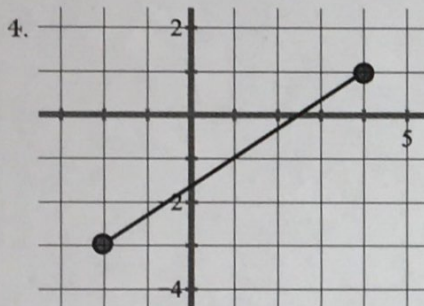
Domain: $(-\infty, \infty)$
Range: $(-\infty, \infty)$



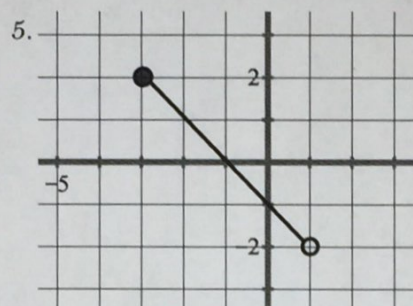
Domain: $(-\infty, 1) \cup (1, \infty)$
Range: $(-\infty, 3) \cup (3, \infty)$



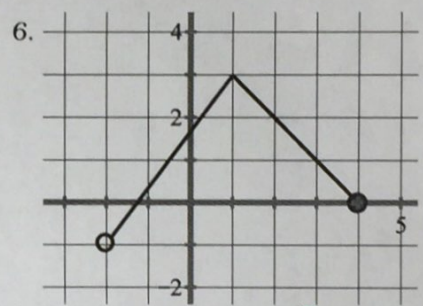
Domain: $\{-2, 1, 2, 5\}$
Range: $\{-2, -1, 0, 3\}$



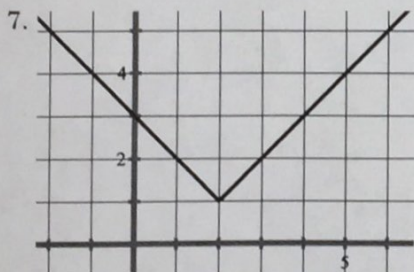
Domain: $[-2, 4]$
Range: $[-3, 1]$



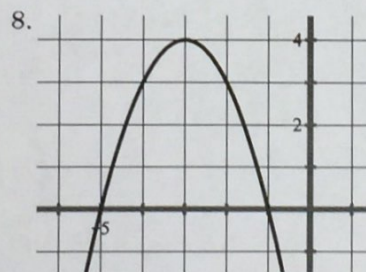
Domain: $[-3, 1)$
Range: $(-2, 2]$



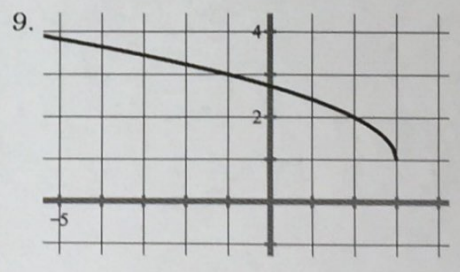
Domain: $(-2, 4]$
Range: $(-1, 3]$



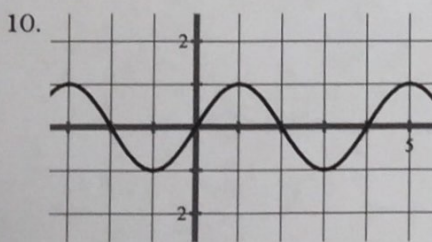
Domain: $(-\infty, \infty)$
Range: $[1, \infty)$



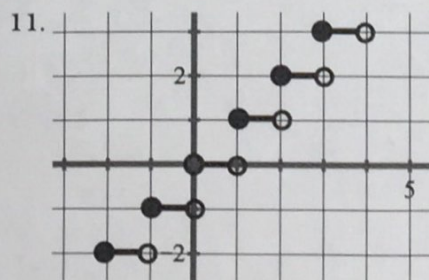
Domain: $(-\infty, \infty)$
Range: $[-\infty, 4]$



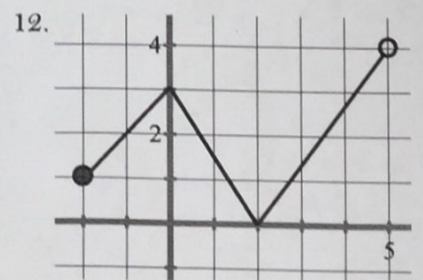
Domain: $(-\infty, 3]$
Range: $[1, \infty)$



Domain: $(-\infty, \infty)$
Range: $[-1, 1]$



Domain: $[-2, 4)$
Range: $[-2, 3]$



Domain: $[-2, 5)$
Range: $[0, 4)$

HW 10

A2

p 193 # 2, 3, 4, 8, 10, a, b

$$f(x) = 3x - 4 \quad g(x) = x^2 + 2$$

2. a) $f(7) = 3 \cdot 7 - 4 = 17$

b) $g(5) = 5^2 + 2 = 27$

c) $f(-5) = 3 \cdot (-5) - 4 = -19$

d) $g(-3) = 3(-3) - 4 = -13$

e) $7 = 3x - 4$

$$11 = 3x$$

$$\frac{11}{3} = x$$

8. D: $[-6, 5]$

R: $[-2, 4]$

10. $f(x) = 3(x+1)^2 - 4$

a) $f(5) = 3(5+1)^2 - 4$

$$f(5) = 3 \cdot 6^2 - 4$$

$$f(5) = 104$$

b) $p(n) = 3(n+1)^2 - 4$

3 B

4. a) $f(13) = 18$

b) $f(25) + f(26) = 2 + 3 = 5$

c) $2 \cdot f(22) = 2 \cdot 7 = 14$

f) $f(x+1) = 26$

$$f(6) = 26$$

$$x+1 = 6$$

$$x = 5$$

j) $f(f(2) + f(3)) = f(4 + 9) = f(13) = 18$

k) $f(9) - f(25) = 22 - 2 = 20$