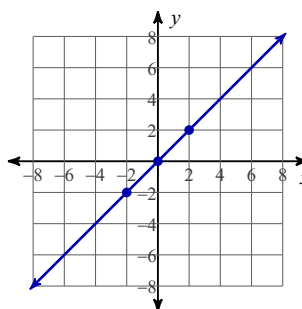
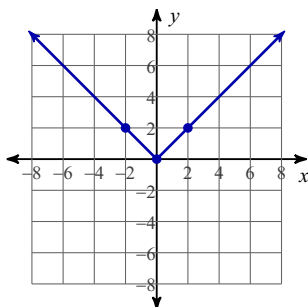


Answers to HW28: Domain and Range

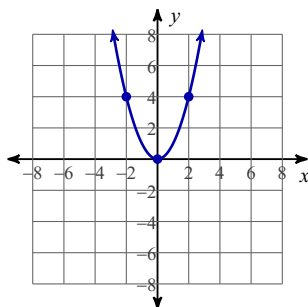
- 1) the set of possible inputs to a relation or function
 2) the set of possible outputs to a relation or function
 3) Yes; domain $\{-3, -2, 4, 8\}$; range $\{4, -1, -4, 7\}$ 4) No; domain $\{-6, -3, 4\}$; range $\{2, 5, 4, 3\}$
 5) Yes 6) Yes 7) Yes
 Domain $-2 < x \leq 4$ or $(-2, 4]$ Domain $-3 \leq x < 1$ or $[-3, 1)$ Domain \mathbb{R} or $(-\infty, \infty)$
 Range $0 \leq y \leq 4$ or $[0, 4]$ Range $-6 \leq y \leq 6$ or $[-6, 6]$ Range $-5 \leq y$ or $[-5, \infty)$
 8) Yes 9) Yes 10) Yes
 Domain $-3 \leq x \leq 1$ or $[-3, 1]$ Domain $-3 < x < 5$ or $(-3, 5)$ Domain \mathbb{R} or $(-\infty, \infty)$
 Range $-4 \leq y \leq 7$ or $[-4, 7]$ Range $-4 < y < 5$ or $(-4, 5)$ Range \mathbb{R} or $(-\infty, \infty)$
 11) Yes 12) No 13) Yes
 Domain \mathbb{R} or $(-\infty, \infty)$ Domain $-2 \leq x$ or $[-2, \infty)$ Domain \mathbb{R} or $(-\infty, \infty)$
 Range $y \leq 5$ or $(-\infty, 5]$ Range \mathbb{R} or $(-\infty, \infty)$ Range \mathbb{R} or $(-\infty, \infty)$
 14) Yes 15)
 Domain $-8 \leq x \leq 8$ or $[-8, 8]$
 Range $\{0, 1, 2, 3, 4, 5, 6, 7, 8\}$



16)



17)



18)

