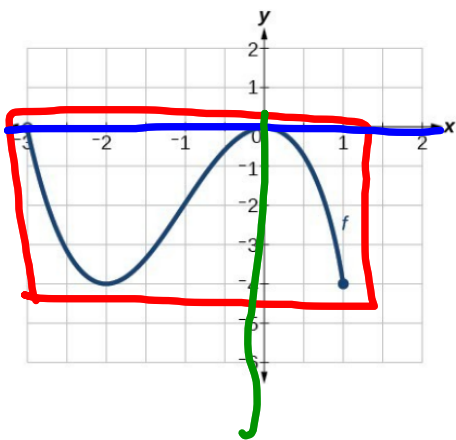


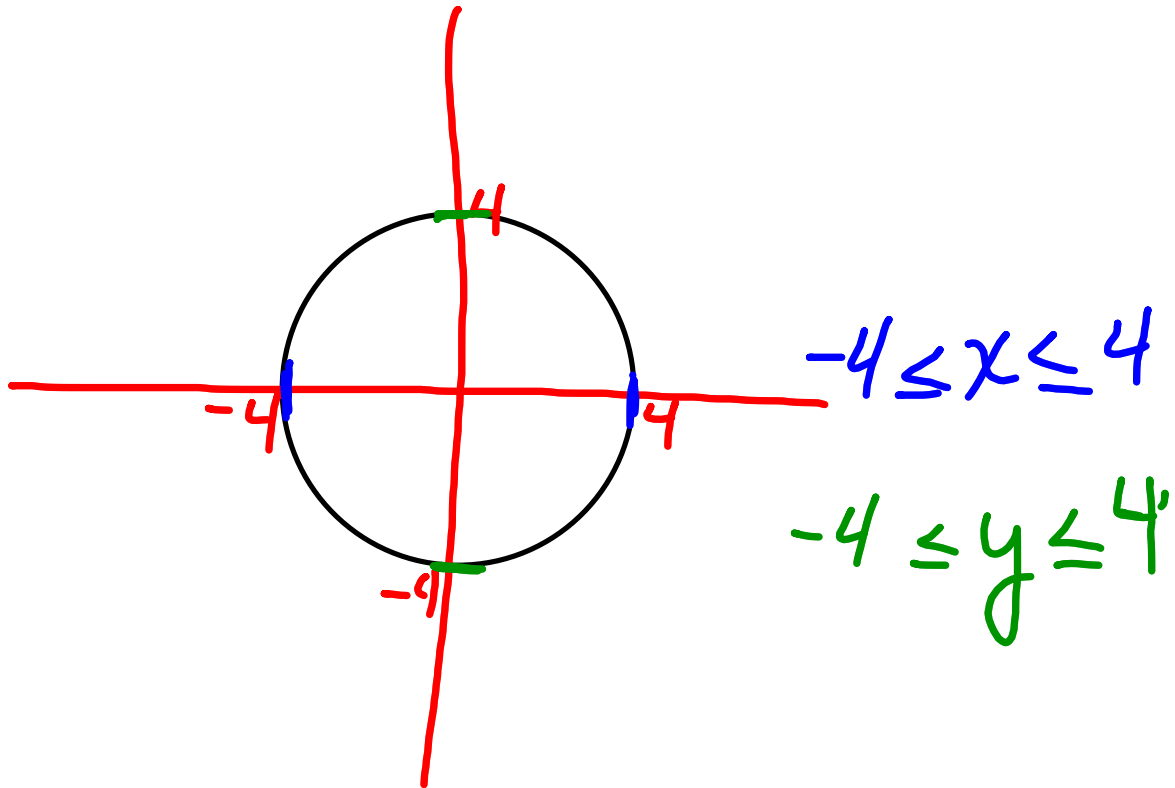
Is the following graph a function? Find the domain and range.



yes

$$\text{Domain: } -3 < x \leq 1$$

$$\text{Range: } -4 \leq y \leq 0$$



- 8.** domain $\{3\}$, range $\{-2, 1, 4, 7, 8\}$; no
- 9.** domain $\{1, 5, 6, 7\}$, range $\{-8, -7, 4, 5\}$; yes
- 10.** domain $\{0.04, 0.2, 1, 5\}$, range $\{0.2, 1, 5, 25\}$; yes
- 11.** domain $\{0, 1, 4\}$, range $\{-2, -1, 0, 1, 2\}$; no

24. Domain $\{0,3,5\}$

Range $\{2, 1, -1, 3\}$

25. Domain $\{-4, -1, 0, 3\}$

Range $\{-4\}$

Restrictions on domain and range

A local theater sells admission tickets for \$9 on Thursday nights. At capacity the theater holds 100 customers

tickets depends on capacity

Independent Variable: capacity

Dependent Variable: tickets

Discrete or Continuous?

Domain: $0 \leq x \leq 100$

Range: $0 \leq y \leq 100$

Bruce earns \$8.50 per hour at his part time job. His parents are worried about him keeping up with grades, so he is allowed to work a maximum of 10 hours each week.

paycheck depends on work hours

Independent Variable: Hours

Dependent Variable: \$

Discrete or Continuous?

Domain: $0 \leq x \leq 10$

Range: $0 \leq y \leq 85$

$$\begin{array}{r} 8.5 \\ \times 10 \\ \hline 85.0 \end{array}$$

At a store, they are selling holiday sweaters for \$32 each. They only have 55 sweaters to sell.

Independent Variable: Sweaters

Dependent Variable: \$

Discrete or Continuous?

Domain: $0 \leq x \leq 55$

Range: $0 \leq y \leq \$1760$

