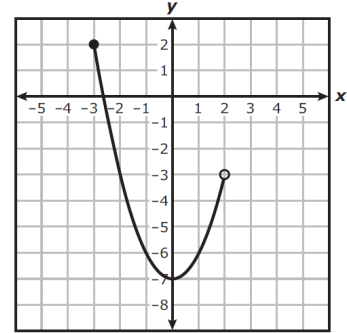
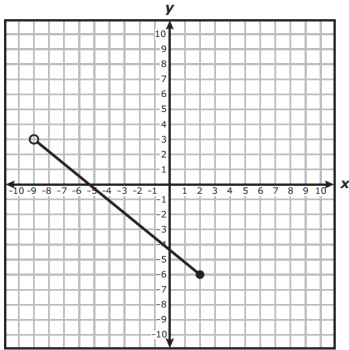


Retake

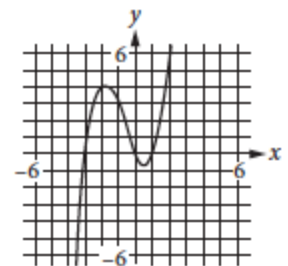
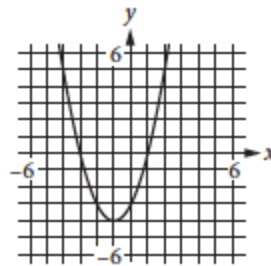
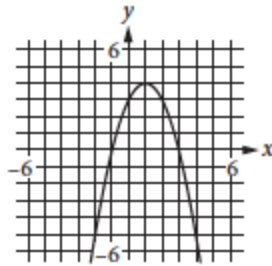
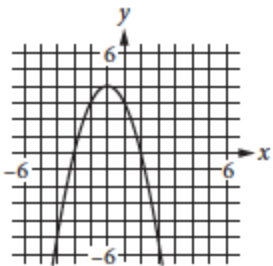
Domain & Range

80 Level

Write the domain and range in brackets for each graph. **Explain.**



The range of the polynomial function f is the set of real numbers less than or equal to 4. If the x -intercepts of f are -3 and 1 , which of the following could be the graph of $y = f(x)$ in the xy -plane? **Explain.**

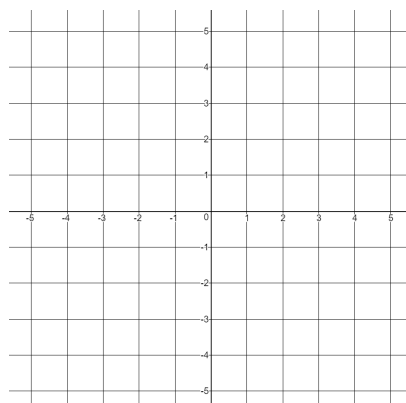


90 Level

Create a **quadratic** graph that satisfies the following requirements. **Explain.**

Domain: $-3 \leq x \leq 2$

Range: $0 \leq y \leq 4$

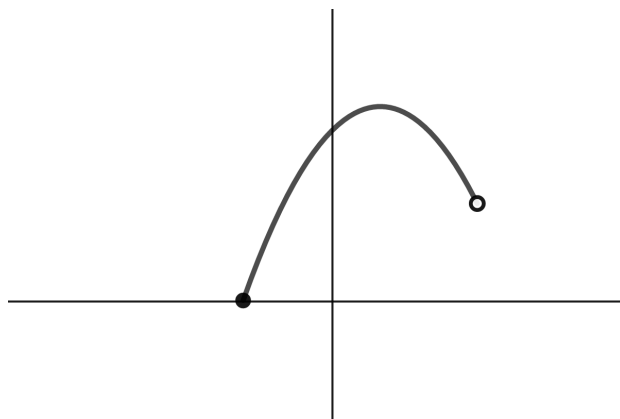


The domain and range of the graph can be represented by the following inequalities:

$$a \leq x < b \quad \text{and} \quad c \leq y \leq d.$$

Which of the following must be true? **Explain.**

- A) $ab = cd$
- B) $cd > ab$
- C) $a + b \geq c + d$
- D) $ab \geq cd$



100 Level

Create 3 graphs that all have the same domain. **Explain.**

