

Use the information to graph  $f(x)$ .

1.

$$f(-2) = f(1) = f(8) = 0$$

$$f'(-1) = f'(5) = 0$$

$$f'(x) < 0 \text{ for } x < -1 \text{ or } x > 5$$

$$f'(x) > 0 \text{ for } -1 < x < 5$$

$$f''(x) > 0 \text{ for } x < 2$$

$$f''(x) < 0 \text{ for } x > 2$$

2.

$$f(0) = 4$$

$$f(6) = 0$$

$$f'(x) < 0 \text{ for } x < 2 \text{ or } x > 4$$

$$f'(2) \text{ does not exist}$$

$$f'(4) = 0$$

$$f'(x) > 0 \text{ for } 2 < x < 4$$

$$f''(x) < 0 \text{ for } x \neq 2$$