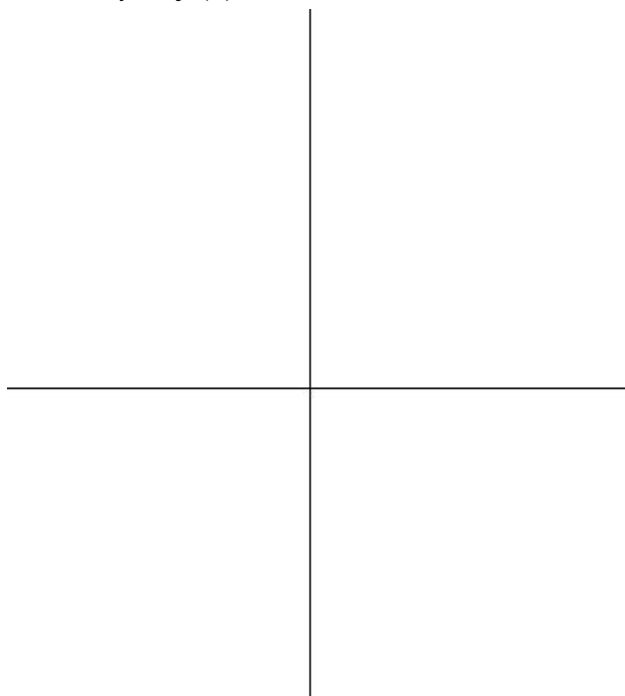


$f(x) =$

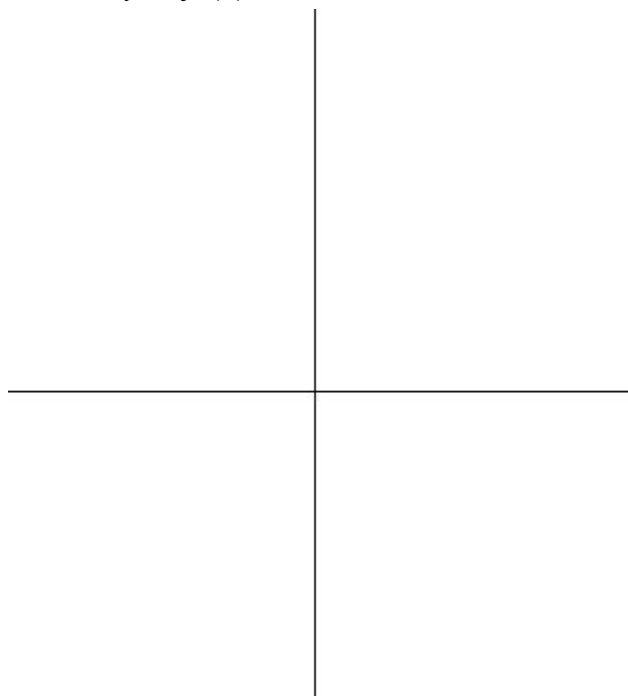
$$f(x) = x^2 - 6x + 8$$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

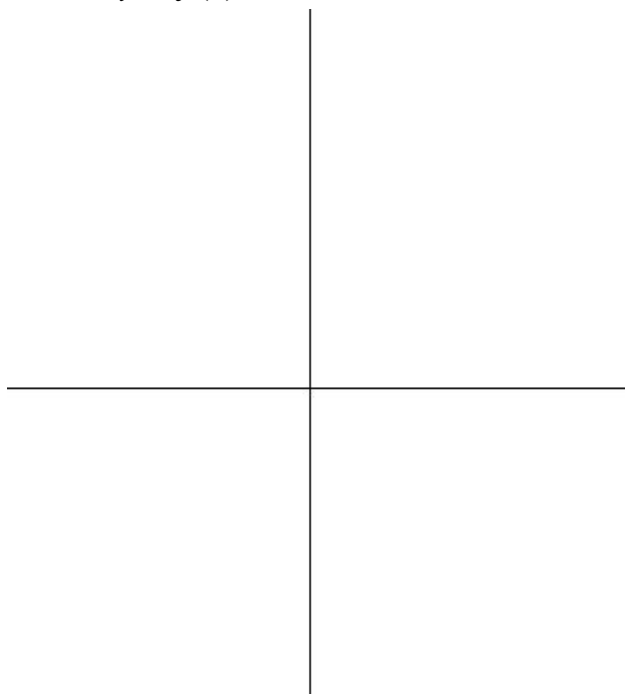
... decreasing?

$f(x) =$

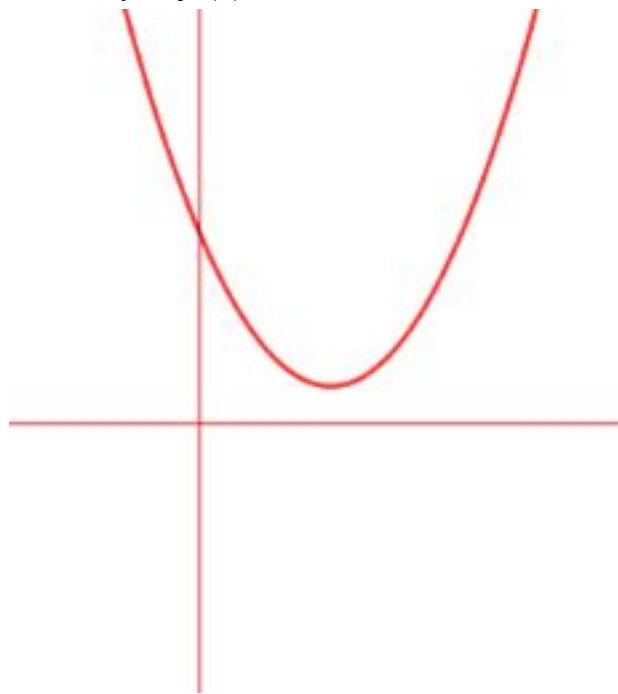
$f'(x) =$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

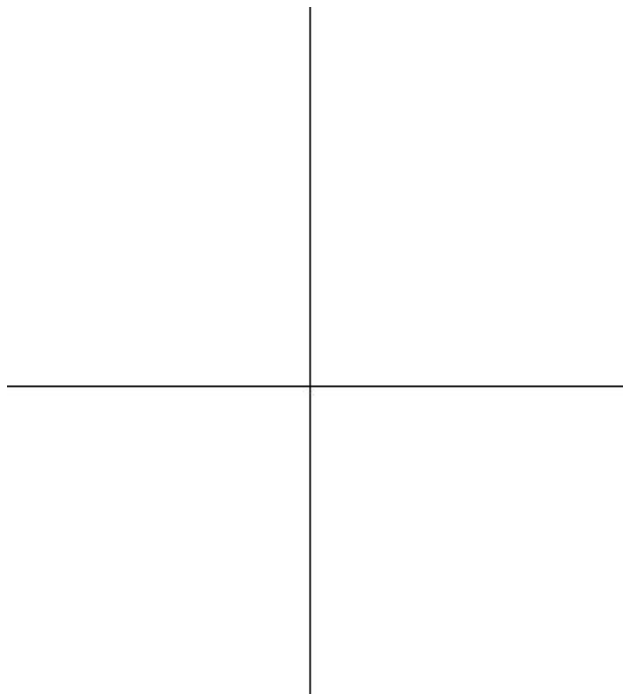
... decreasing?

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

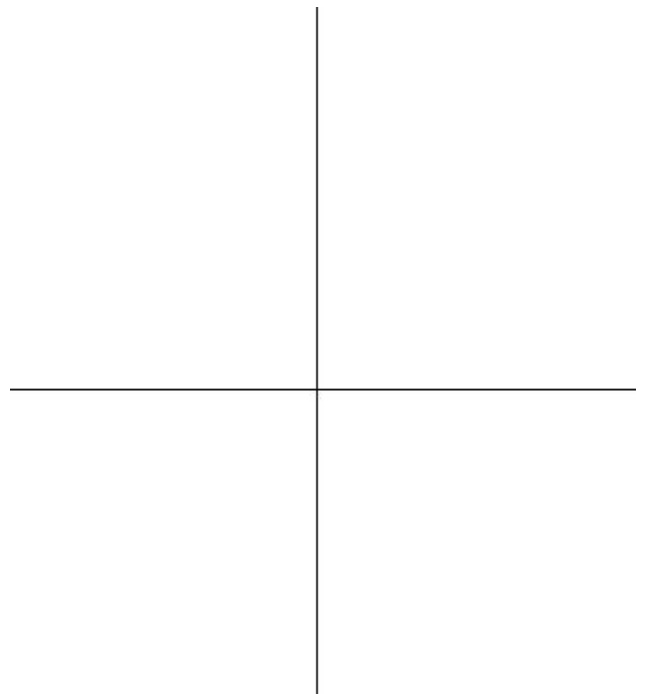
$$f'(x) =$$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

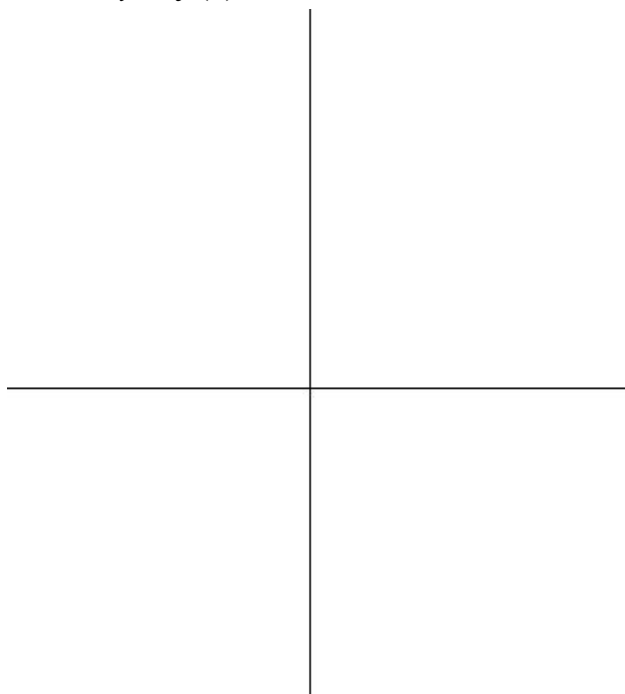
... decreasing?

$f(x) =$

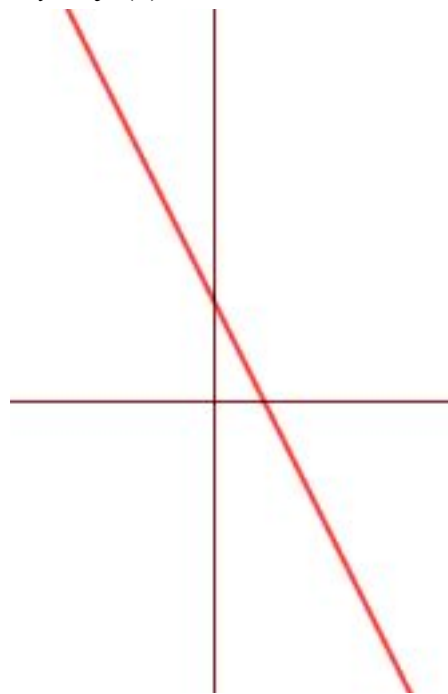
$f'(x) =$

Turning points at:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

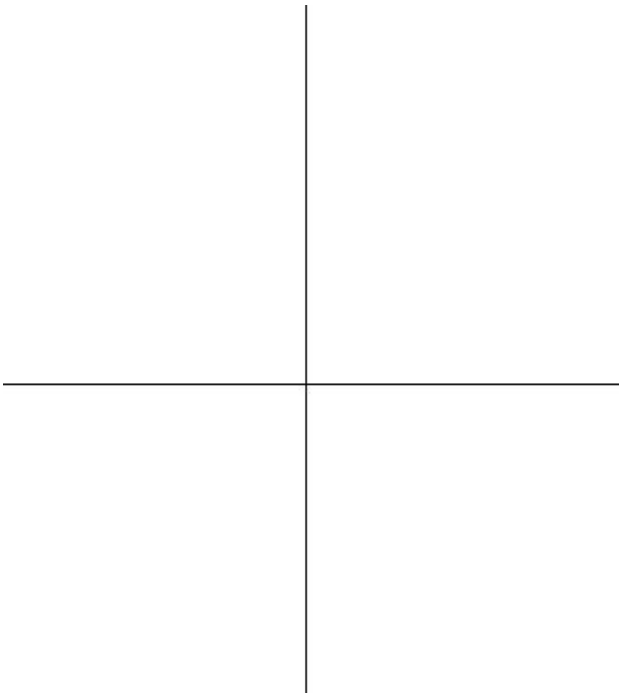
... decreasing?

$$f(x) = x^3 + x$$

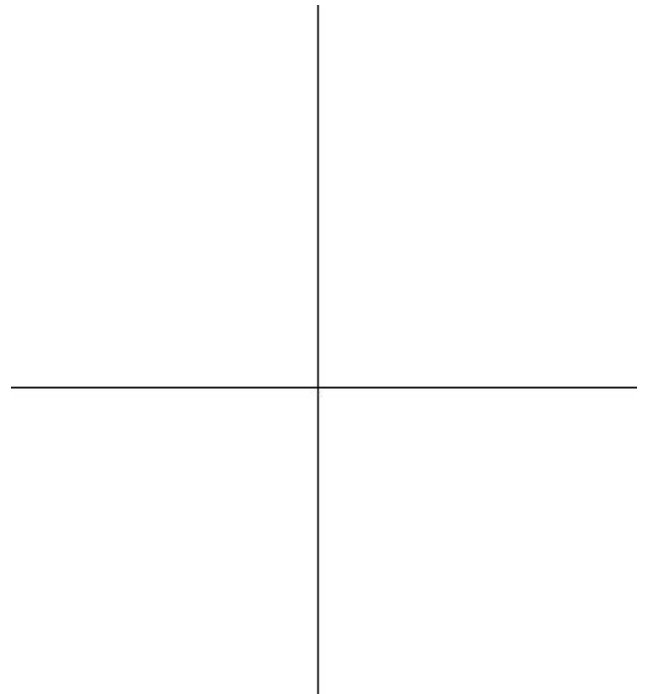
$$f'(x) =$$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

... decreasing?

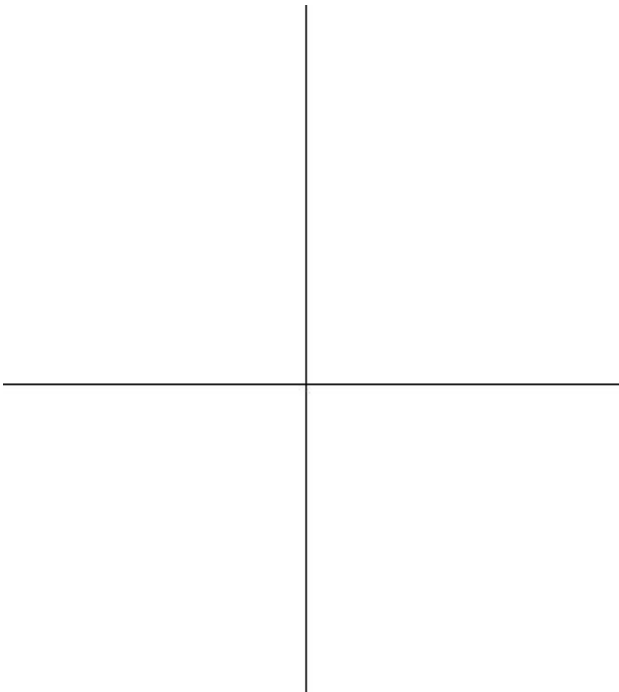
$f(x) =$

$f'(x) =$

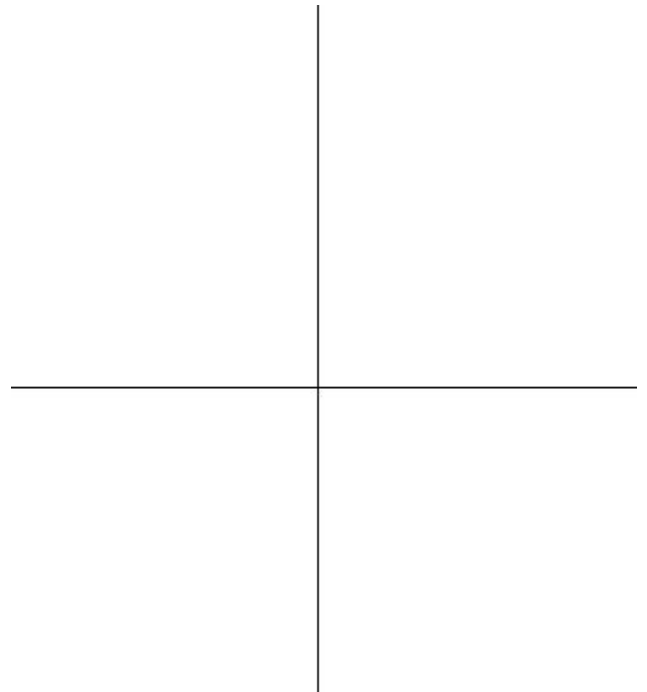
Turning points:

Only one turning point, a minimum at (2, 5).

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

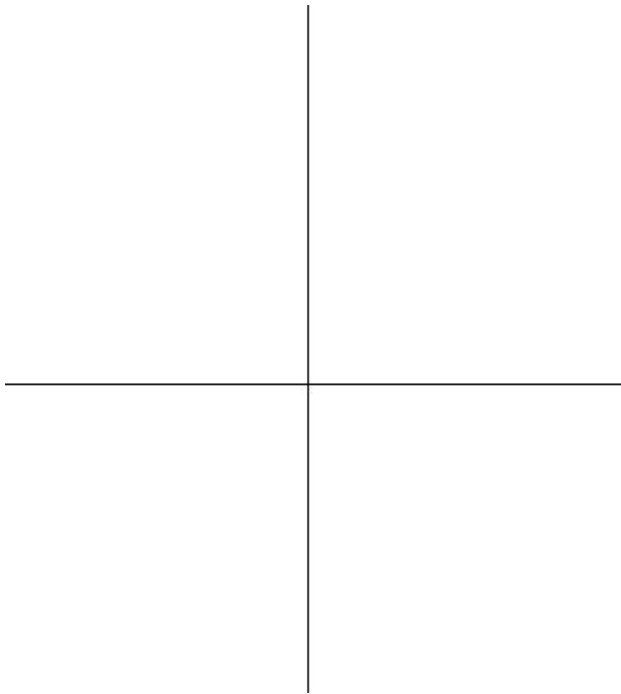
... decreasing?

$f(x) =$

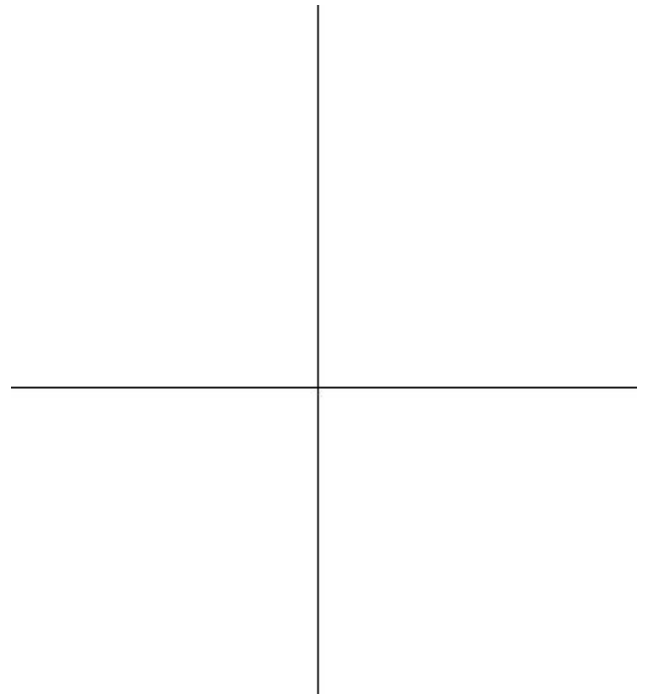
$f'(x) =$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

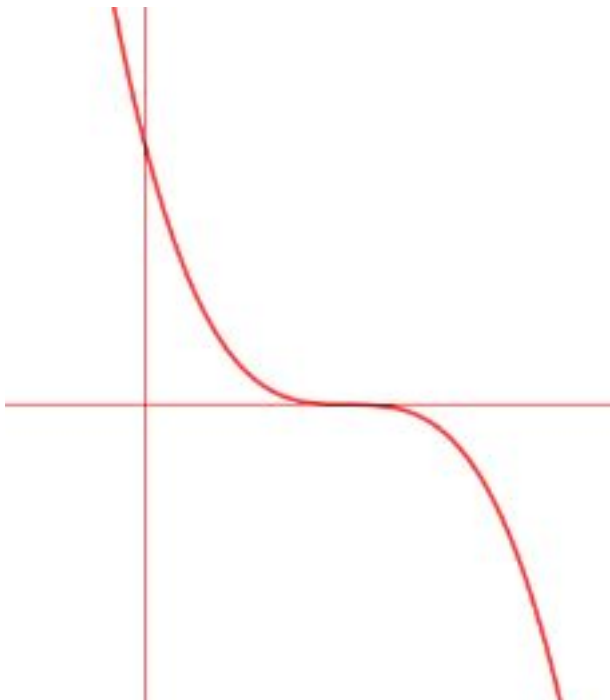
... decreasing? *This function is always decreasing.*

$f(x) =$

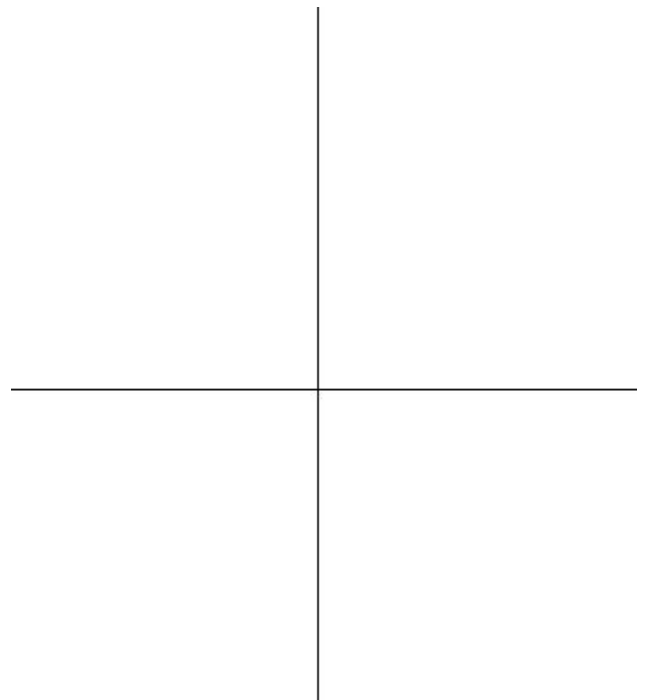
$f'(x) =$

Turning points at:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

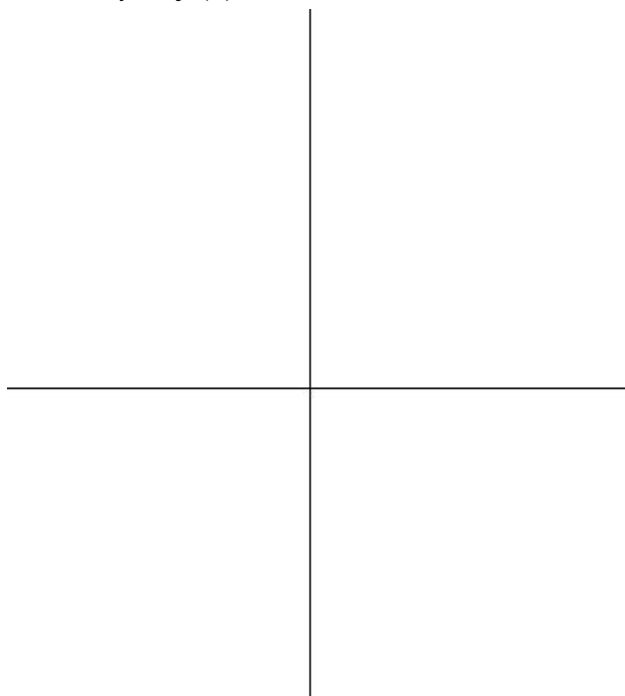
... decreasing?

$f(x) =$

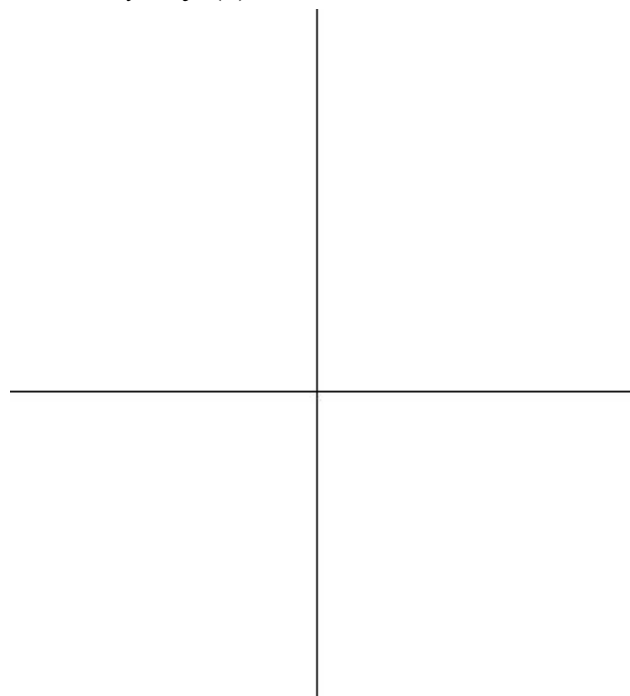
$f'(x) = 3$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

... decreasing?

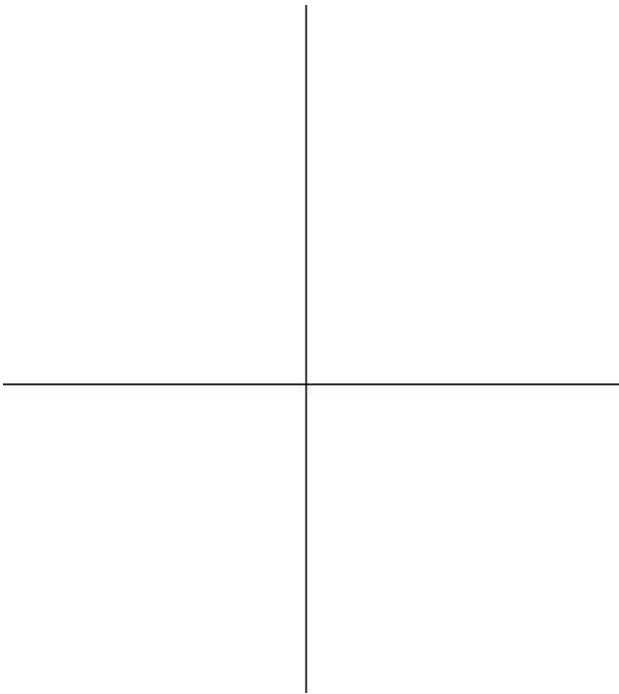
Create your own

$f(x) =$

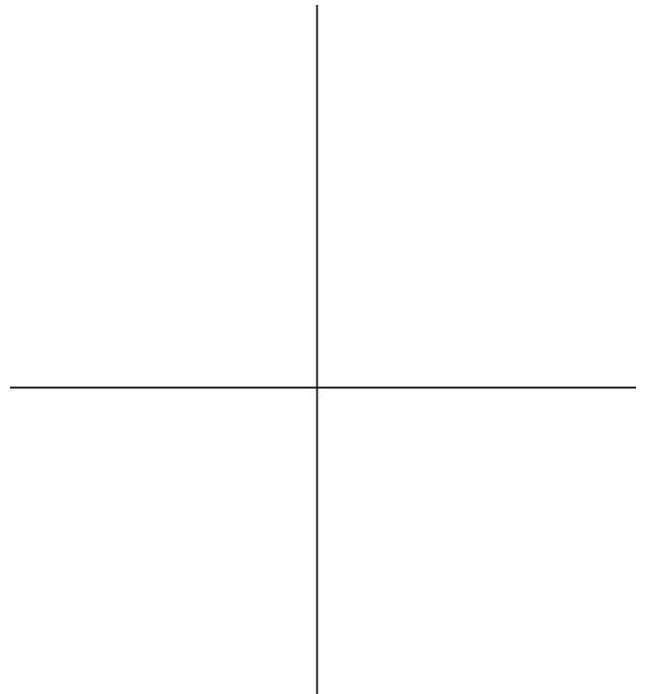
$f'(x) =$

Turning points:

Sketch of $y = f(x)$



Sketch of $y = f'(x)$



For what values of x is the function...

... increasing?

... decreasing?