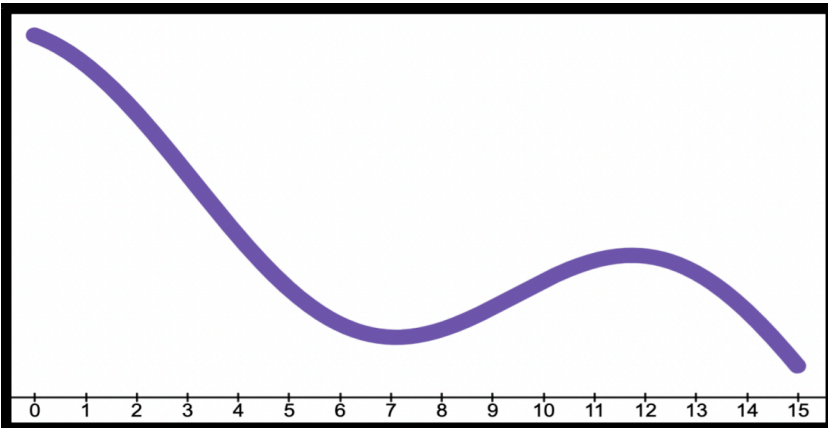
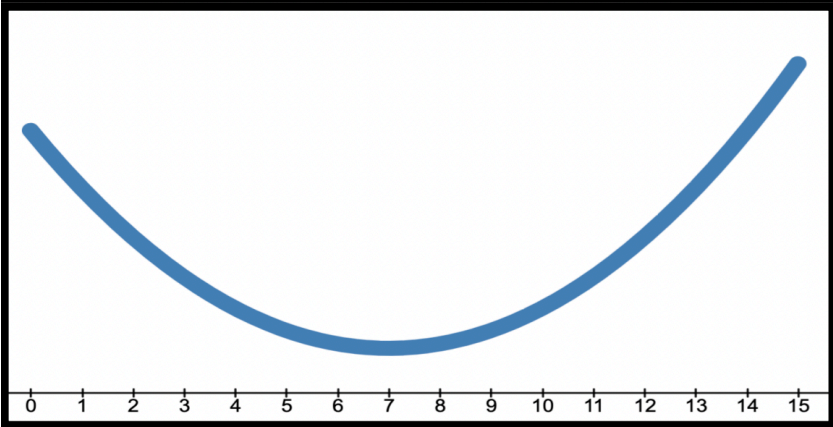


When is this function increasing?

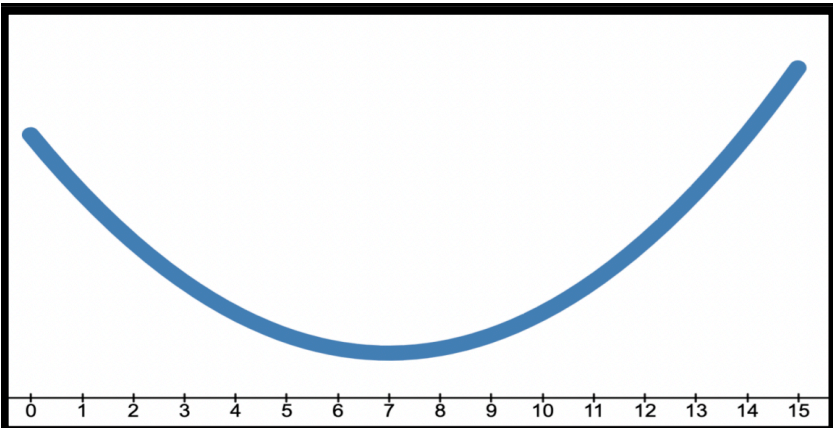


When is this function increasing?

$$7 < x < 12$$

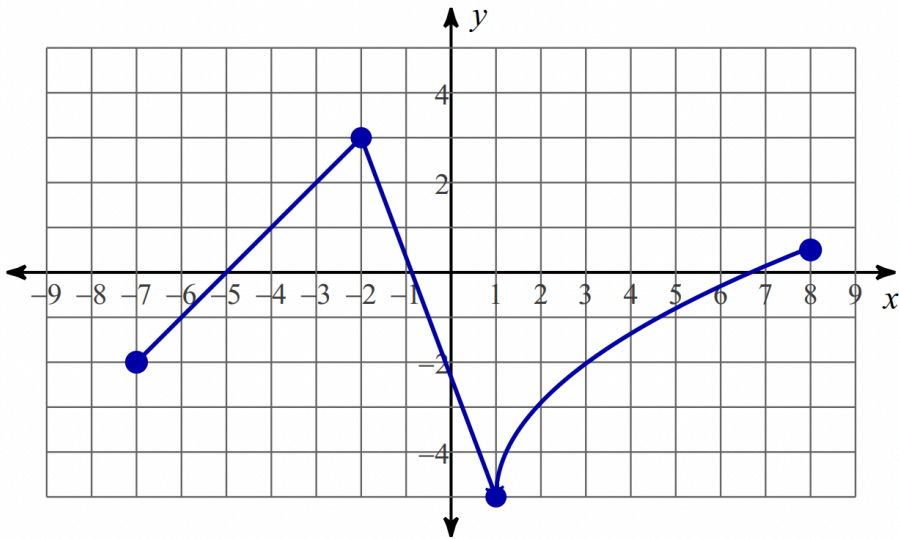


When is this function increasing?

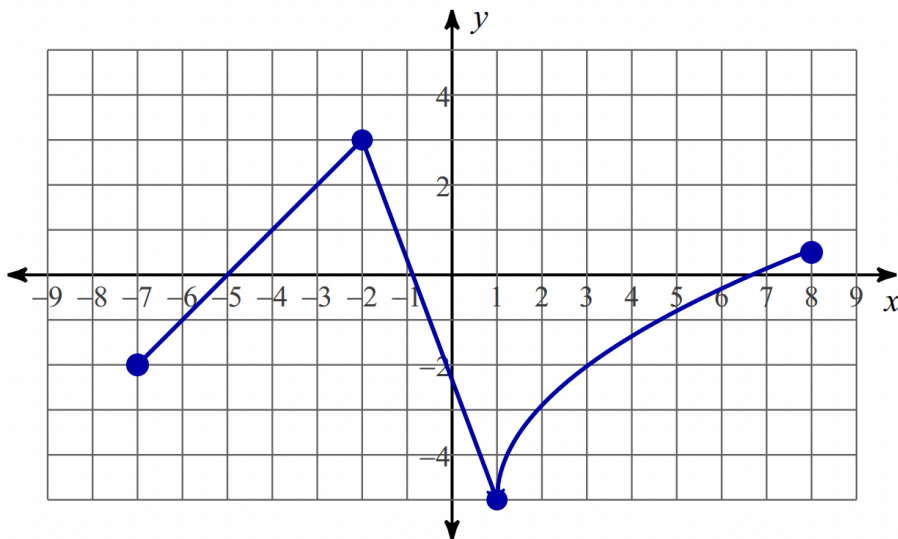


When is this function increasing?

$$7 < x < 15$$

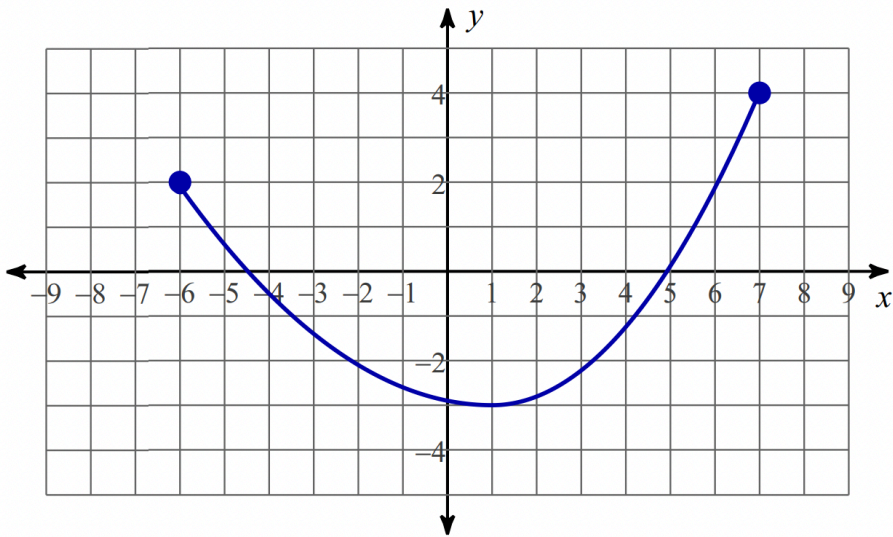


When is this function increasing?

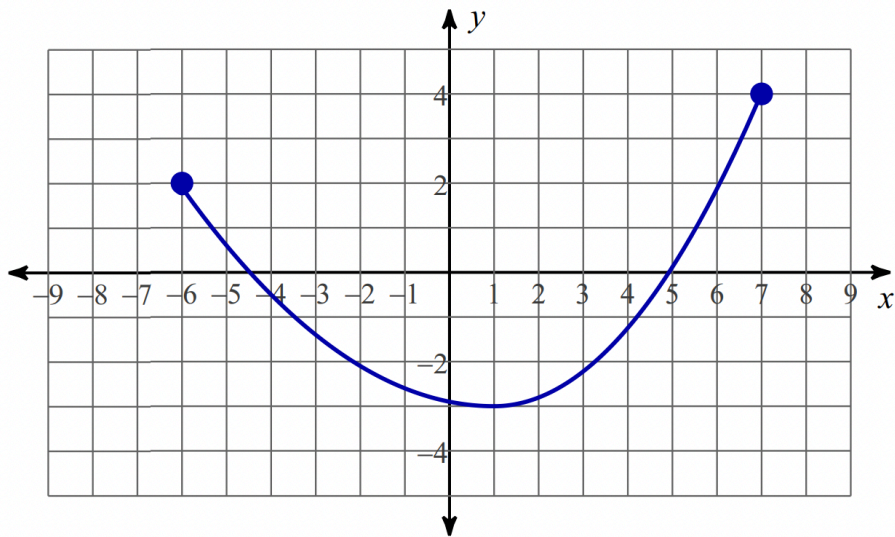


When is this function increasing?

$-7 < x < -2$
and
 $1 < x < 8$

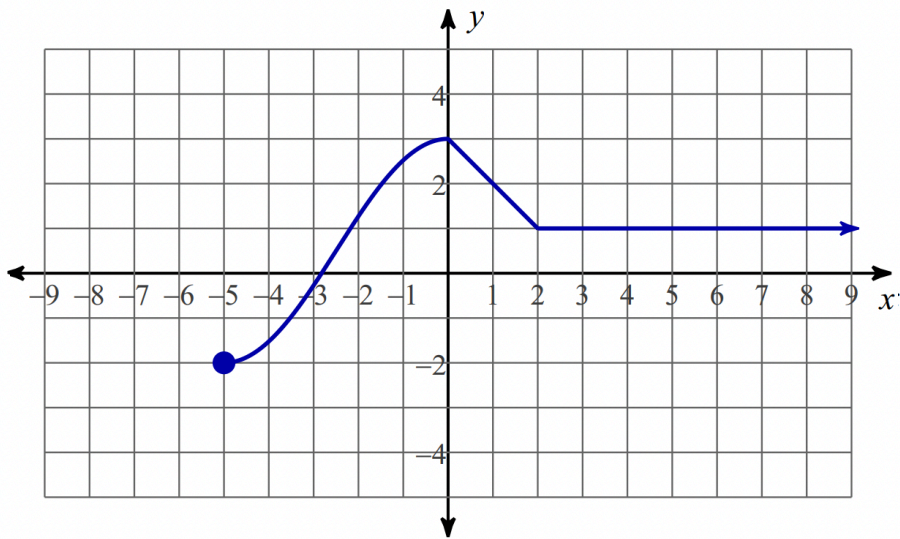


When is this function increasing?

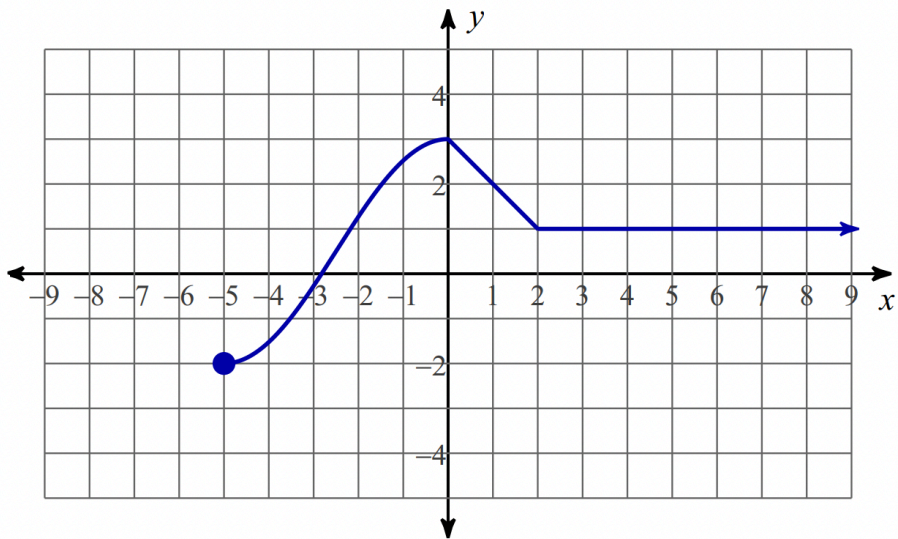


When is this function increasing?

$$1 < x < 7$$

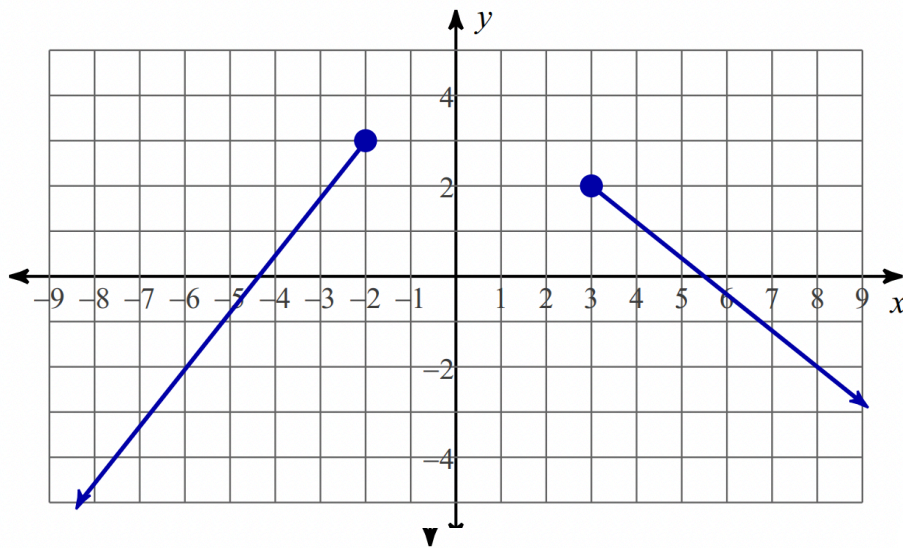


When is this function increasing?

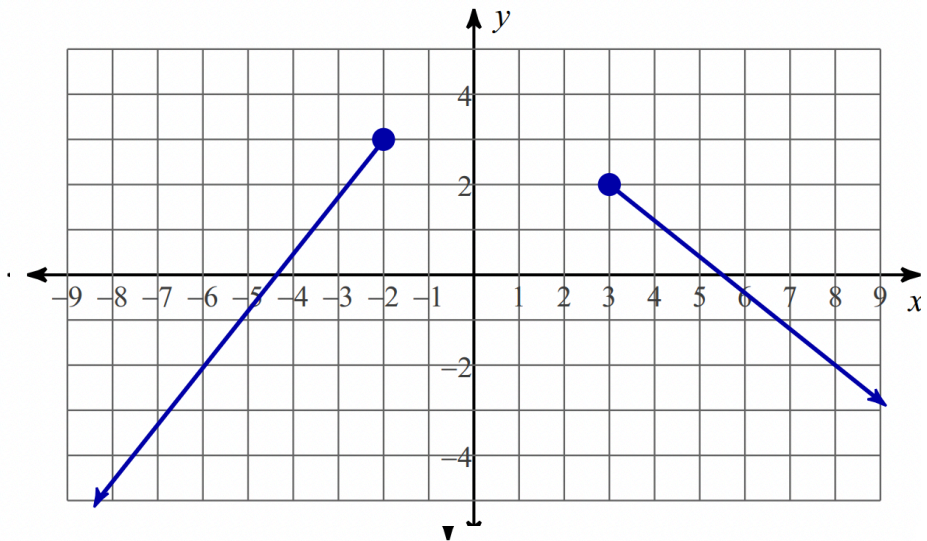


When is this function increasing?

$$-5 < x < 0$$

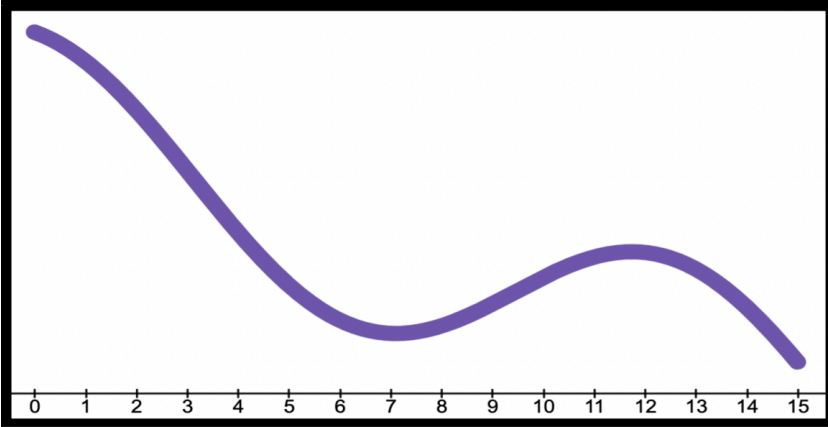


When is this function increasing?

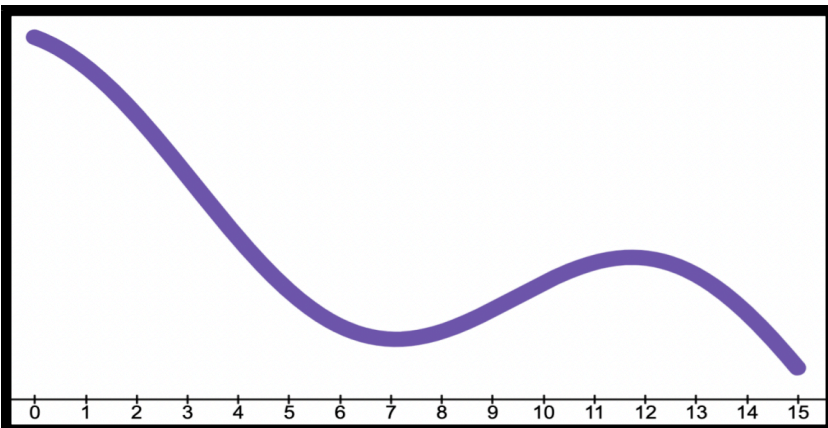


When is this function increasing?

$$-\infty < x < -2$$

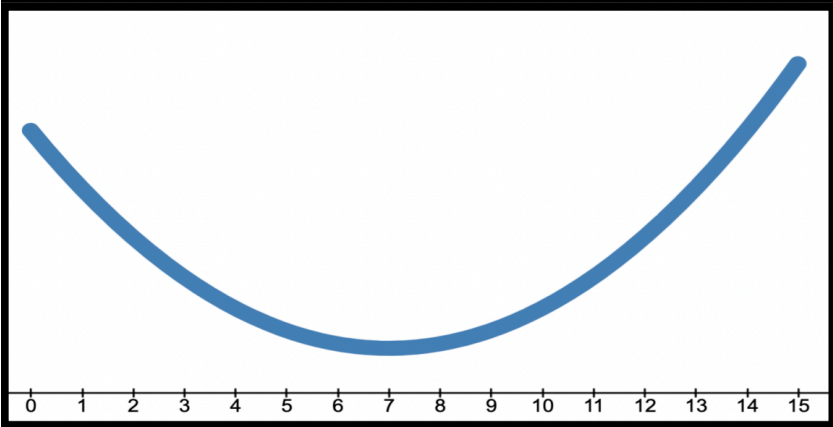


When is this function decreasing?

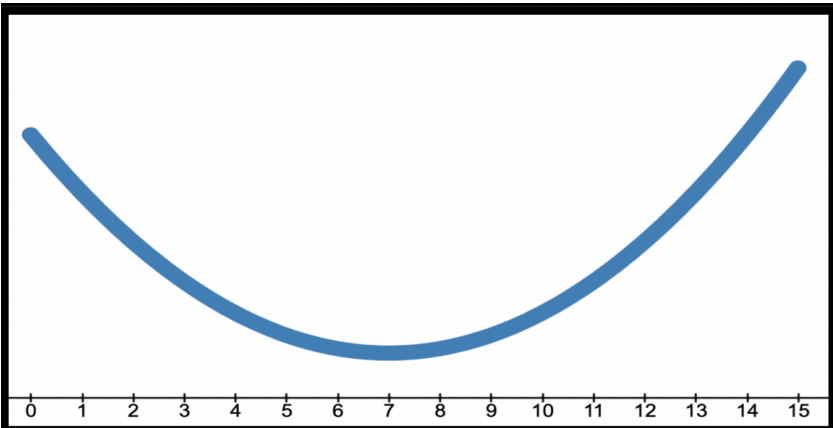


When is this function decreasing?

$0 < x < 7$
and
 $12 < x < 15$

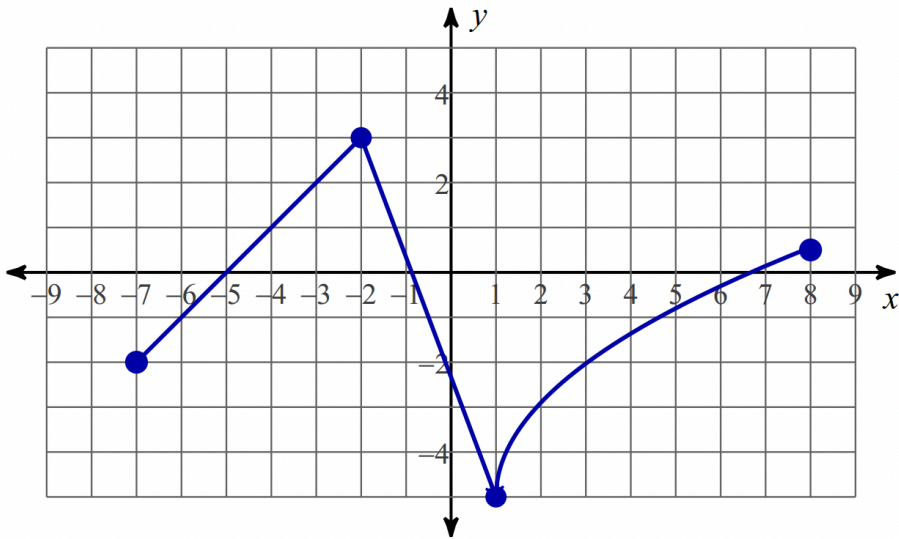


When is this function decreasing?

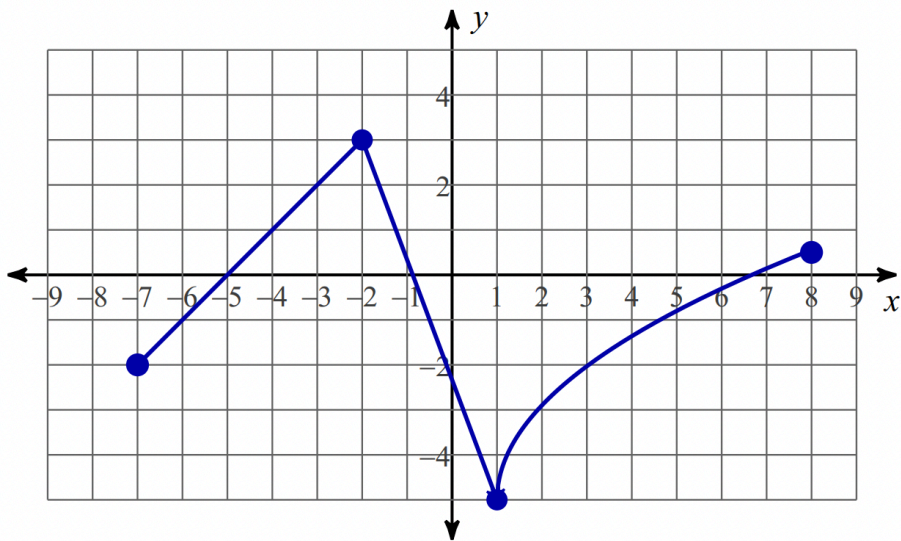


When is this function decreasing?

$$0 < x < 7$$

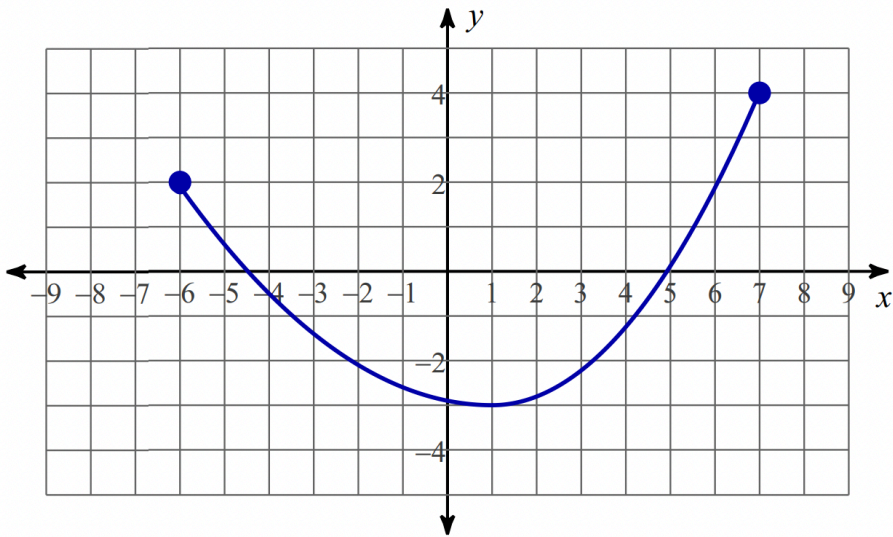


When is this function decreasing?

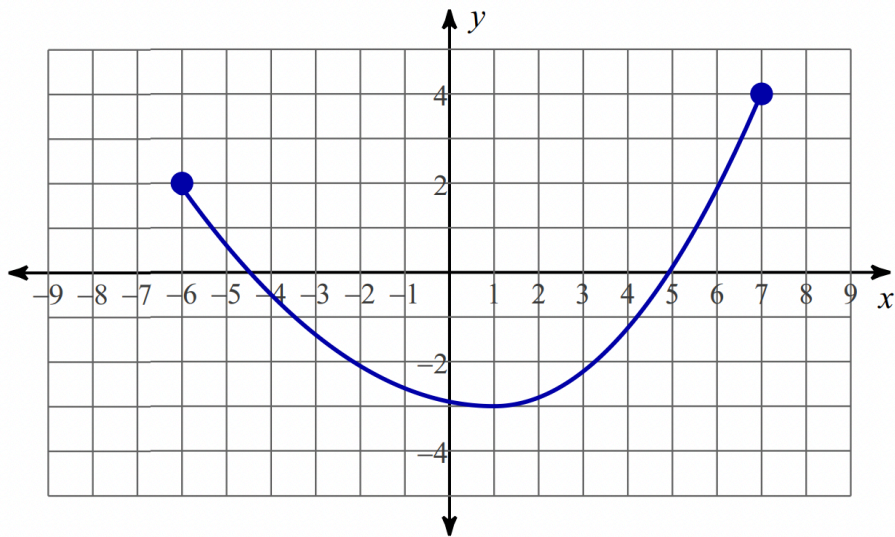


When is this function decreasing?

$$-2 < x < 1$$

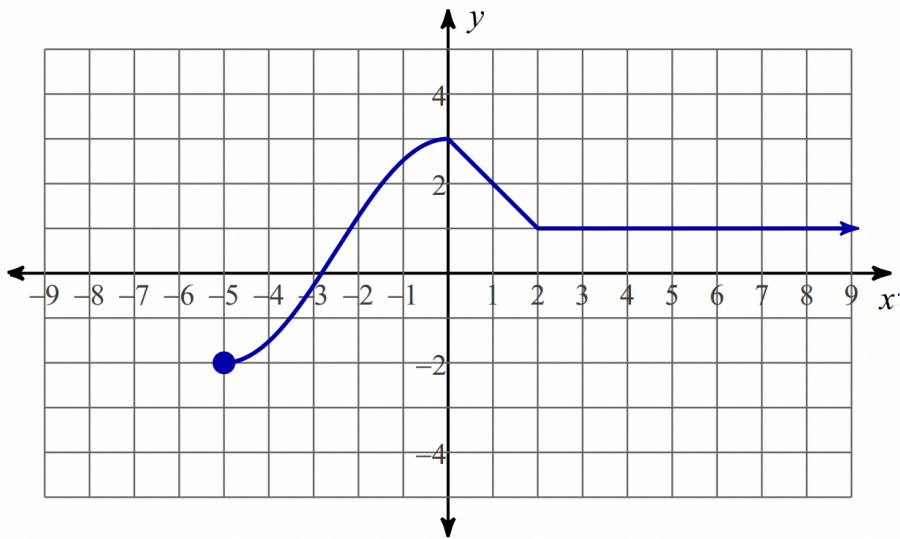


When is this function decreasing?

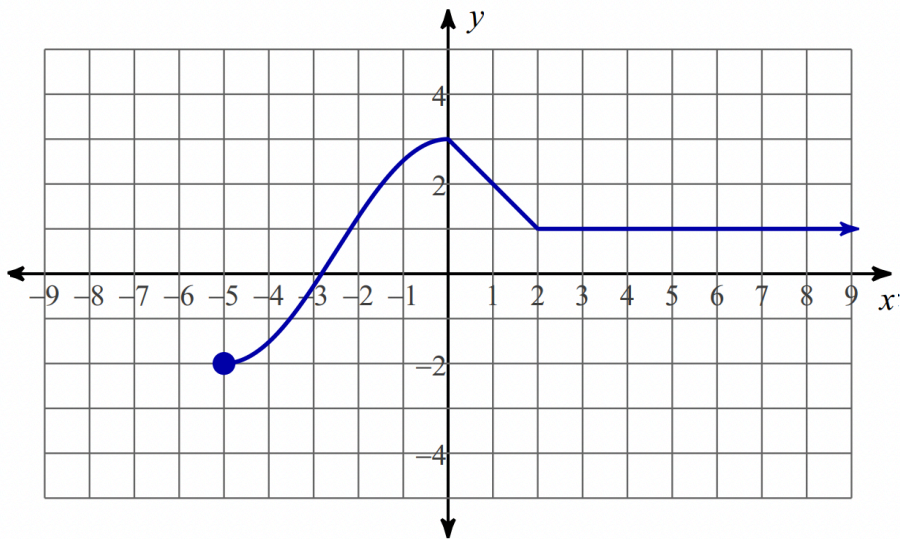


When is this function decreasing?

$$-6 < x < 1$$

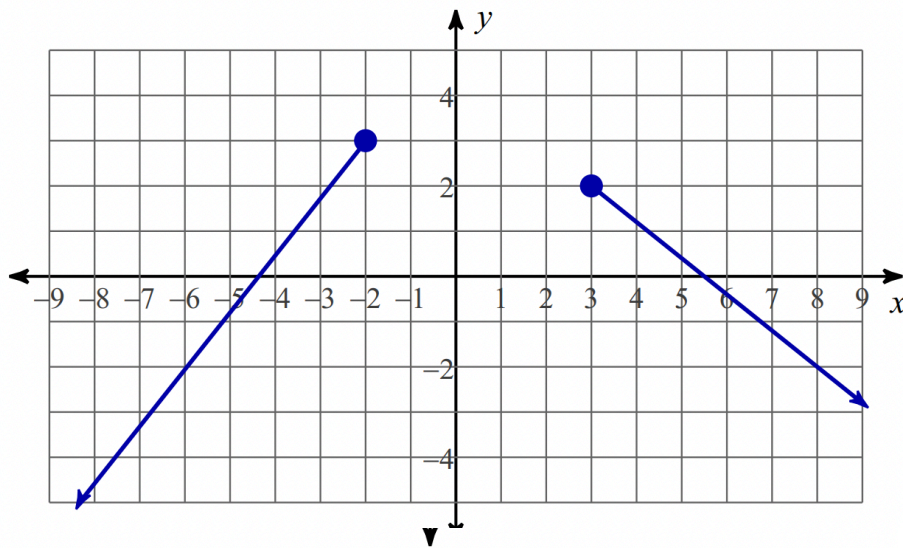


When is this function decreasing?

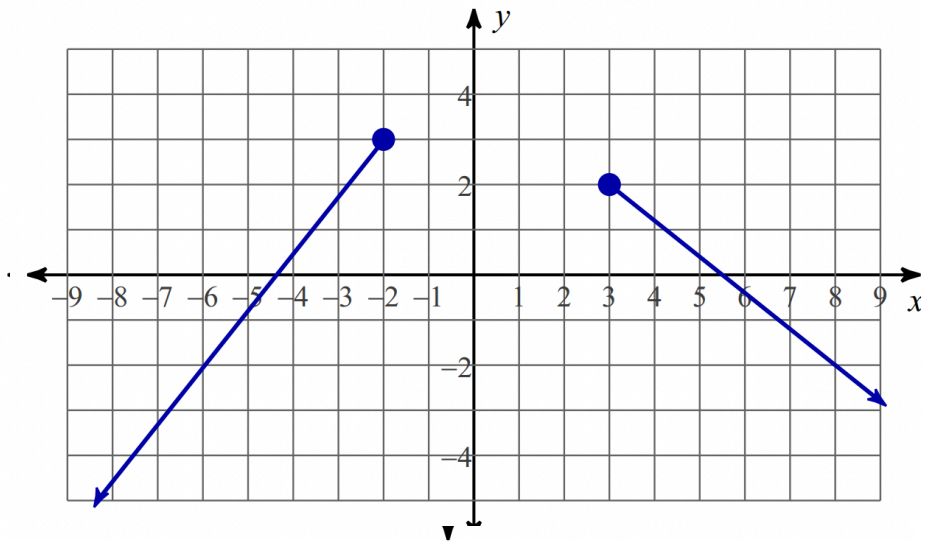


When is this function decreasing?

$$0 < x < 2$$

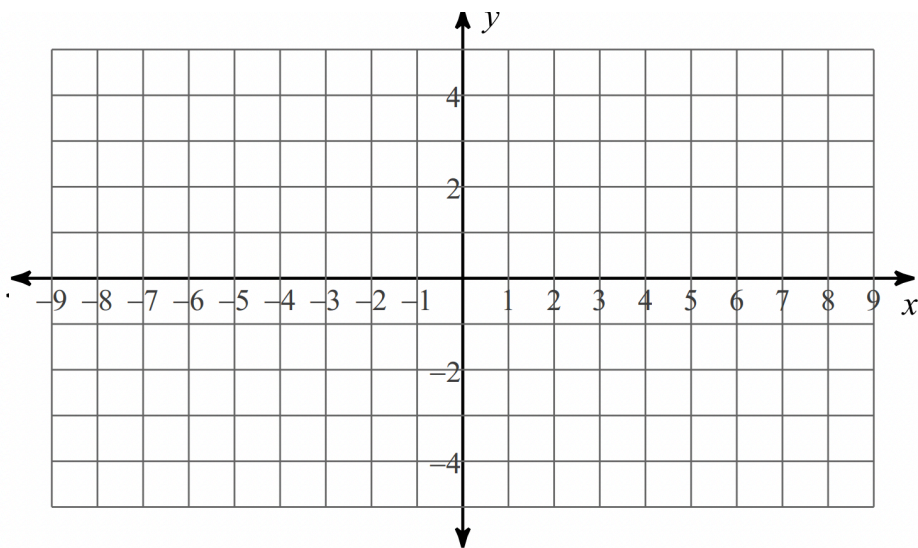


When is this function decreasing?



When is this function decreasing?

$$3 < x < \infty$$



Sketch a function to match.

increasing

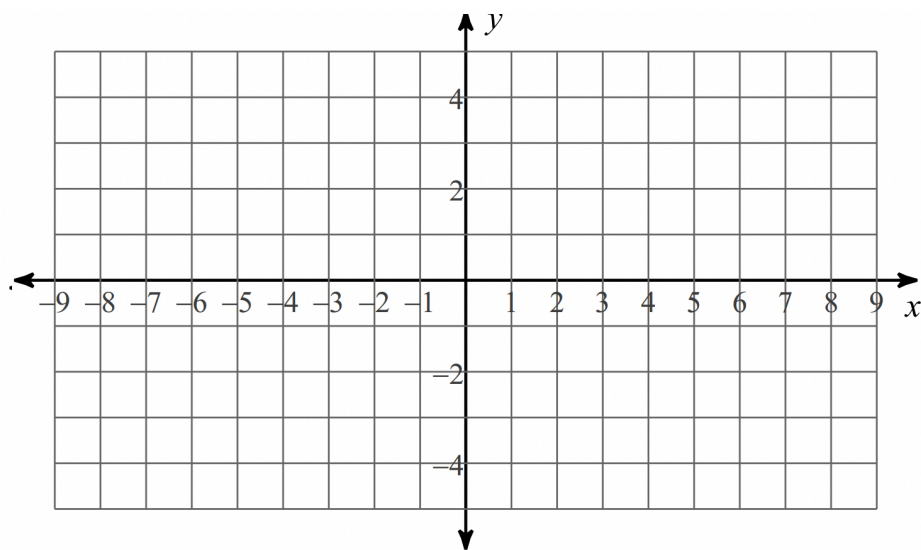
$$-2 < x < 4$$

decreasing

$$4 < x < 8$$

constant

$$-7 < x < 2$$



Sketch a function to match.

increasing

$$-\infty < x < 0$$

decreasing

$$0 < x < 4$$

constant

none