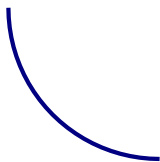


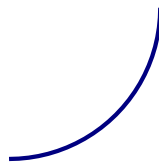
$$f'(x) < 0$$

$$0 < f'(x)$$

$$0 < f''(x)$$

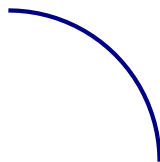


Here $y = f(x)$ is decreasing, while the rate itself is increasing. In this case the curve is **concave up**.

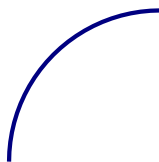


Here $y = f(x)$ is increasing, while the rate itself is increasing. In this case the curve is **concave up**.

$$f''(x) < 0$$



Here $y = f(x)$ is decreasing, while the rate itself is decreasing. In this case the curve is **concave down**.



Here $y = f(x)$ is increasing, while the rate itself is decreasing. In this case the curve is **concave down**.