

18. $y = 3x^{2/3} - 2x$

$$y' = 2x^{-1/3} - 2 = \frac{2(1 - x^{1/3})}{x^{1/3}}$$

= 0 when $x = 1$ and undefined when $x = 0$.

$$y'' = \frac{-2}{3x^{4/3}} < 0 \text{ when } x \neq 0.$$

	y	y'	y''	Conclusion
$-\infty < x < 0$		-	-	Decreasing, concave down
$x = 0$	0	Undefined	Undefined	Relative minimum
$0 < x < 1$		+	-	Increasing, concave down
$x = 1$	1	0	-	Relative maximum
$1 < x < \infty$		-	-	Decreasing, concave down

