

Klappertest Berechnung Exakte Steigung



Name _____

Exakte Steigung

Berechne die exakte Steigung bei dem gegebenen x_0 .



Lösungen wegklappen
oder abschneiden

1	$f(x) = 4x^5 + 6x^3 + \frac{1}{4}x^2, x_0 = 1$	$m = 77/2$
2	$f(x) = -1.2x^3 + 2.5x^2, x_0 = 2.5$	$m = -10$
3	$f(x) = -x^4 + 2x^2 + 2x + \sqrt{7}, x_0 = -1$	$m = 2$
4	$f(x) = 0.25x^4 + 2x^3 + 3x^2 + 7, x_0 = 2$	$m = 44$
5	$f(x) = -\frac{2}{3}x^3 + \frac{1}{3}x^3 + 2\sqrt{3}, x_0 = -3$	$m = 27$
6	$f(x) = -\frac{3}{4}x^8 + 2.5x^4 - 2x + 4, x_0 = 1.5$	$m = -70.765625$
7	$f(x) = 5x^4 - 0.2x^3 + 0.4x^2 - 7, x_0 = 0.2$	$m = 0.296$
8	$f(x) = 0.3x^5 + \frac{1}{7}x^3 + 2x, x_0 = -\frac{3}{4}$	$m = 2.7156$
9	$f(x) = -\frac{3}{4}x^4 + \frac{1}{2}x^4 + x - 3, x_0 = 1.5$	$m = -19/8$
10	$f(x) = -\frac{1}{3}x^4 - 2x^3 + \frac{3}{4}x^2, x_0 = -3$	$m = -45/2$
11	$f(x) = x^4 - 0.8x^2 - 7x, x_0 = 5$	$m = 485$
12	$f(x) = 0.5x^5 - 1.8x^2 - 7, x_0 = -2$	$m = 47.2$