

Using the second derivative test to find local/relative extrema (Number 2)

1.  $f(x) = 4x - x^2$

4.  $f(x) = x^3 - 5x^2 + 7x$

2.  $f(x) = x^2 + 5x - 15$

5.  $f(x) = x^5 - x^3$

3.  $f(x) = x^3 - 12x^2 + 45x$

6.  $f(x) = x^3 + \frac{48}{x}$

7.  $f(x) = x^4 + \frac{128}{x^2}$