

Studia in modo completo le seguenti funzioni:

1) $y = -x^3 + 2x^2 - x$ $m = \left(\frac{1}{3}; -\frac{4}{27}\right)$ $M = (1; 0)$

2) $y = 4x^3 - 11x^2 - 4x + 11$ $M = \left(-\frac{1}{6}; \frac{1225}{108}\right)$ $m = (2; -9)$

3) $y = \frac{1}{2}x + 3 + \frac{2}{x} \Rightarrow y = \frac{x^2 + 6x + 4}{2x}$ $M = (-2; 1)$ $m = (2; 5)$

4) $y = \frac{6 - 3x^2}{(x - 2)^2}$ $M = (1; 3)$ $F = \left(\frac{1}{2}; \frac{7}{3}\right)$

5) $y = \frac{2 - 3x}{x^2}$ $m = \left(\frac{4}{3}; -\frac{9}{8}\right)$ $F = (2; -1)$

6) $y = \frac{x}{x^2 + 1}$ $m = \left(-1; -\frac{1}{2}\right)$ $M = \left(1; \frac{1}{2}\right)$ $F_1 = \left(-\sqrt{3}; -\frac{\sqrt{3}}{4}\right)$ $F_2 = (0; 0)$ $F_3 = \left(\sqrt{3}; \frac{\sqrt{3}}{4}\right)$

7) $y = \frac{2 - x^2}{(x - 2)^2}$ $M = (1; 1)$ $F = \left(\frac{1}{2}; \frac{7}{9}\right)$ tg infless. $y = \frac{16}{27}x + \frac{13}{27}$

8) $y = \frac{x^2 - x - 2}{1 - 2x}$

9) $y = 3x^2 - x^3$ $m = (0; 0)$ $M = (2; 4)$

10) $y = x^3 - 3x + 2$ $M = (-1; 4)$ $m = (1; 0)$



