

2.66  
3

(1)  $x \neq 0$

(2)  $\lim_{x \rightarrow 0^+} \frac{x^2 - 3x + 6}{x^2} = \frac{6}{+0} = \infty$   
 $\lim_{x \rightarrow 0^-} \frac{x^2 - 3x + 6}{x^2} = \frac{6}{+0} = \infty$

$m = \lim_{x \rightarrow \infty} \frac{x^2 - 3x + 6}{x \cdot x^2} = 0$   
 $n = \lim_{x \rightarrow -\infty} \frac{x^2 - 3x + 6}{x^2} = 1$

(3-4)

$f' = \frac{(2x-3)x^2 - 2x(x^2 - 3x + 6)}{x^4} =$   
 $= \frac{2x^3 - 3x^2 - 2x^3 + 6x^2 - 12x}{x^4} = \frac{3x^2 - 12x}{x^4} = \frac{3x(x-4)}{x^4} = \frac{3(x-4)}{x^3}$

$x > 4, x < 0$  : חיוב  
 $1 < x < 4$  : שלילי  
 $\min(4, \frac{10}{16})$

-1	0	1	4	5
+	/	-	0	+
↗		↘	min	↗

$x=4$

