

the points of inflection = $(0.845, f(0.845))$
 $= (3.15, f(3.15))$

21 $y = x^{\frac{2}{3}}(x-4)$

$$y' = \frac{4(x-1)}{3x^{\frac{2}{3}}}$$

$$y'' = \frac{4(x+2)}{9x^{\frac{5}{3}}}$$

find critical values, relative max., min., and points of inflection.

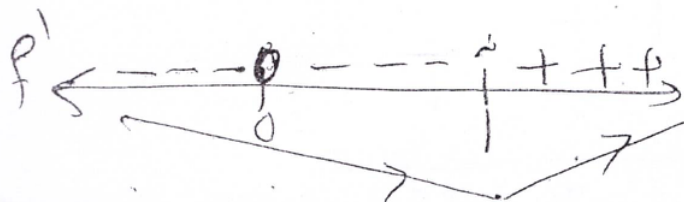
$$\rightarrow y' = 0$$

$$\frac{4(x-1)}{3x^{\frac{2}{3}}} = 0 \rightarrow \frac{4(x-1)}{4} = \frac{0}{4} \rightarrow x-1=0 \rightarrow \boxed{x=1}$$

$\rightarrow y'$ is undefined:-

$$\frac{3}{3} \cdot \frac{2}{3} = \frac{0}{3} \rightarrow x^{\frac{2}{3}} = 0 \rightarrow \left(x^{\frac{2}{3}}\right)^{\frac{3}{2}} = 0^{\frac{2}{3}}$$

$$\boxed{x=0}$$



∴ max. : No points.
 min. : $(6, f(6)) = (6, -3)$
~~points of inflection~~