Si $m=2 \Rightarrow f(x)=\begin{cases} 3-(2)^2=-1 & \text{si } x\leq 1 \\ \frac{2}{2x}=\frac{1}{x} & \text{si } x>1 \end{cases}$

RECTA TANGENTE EN $X_0=3$

$$t(x)-f(x_0)=f'(x_0)(x-x_0)$$

$$t(x)-f(3)=f'(3)(x-3)$$

$f(x)=\frac{1}{x}$ $\qquad$ $f'(x)=\frac{0\cdot x-1\cdot 1}{x^2}=-\frac{1}{x^2}$

$f(3)=\frac{1}{3}$ $\qquad$ $f'(3)=-\frac{1}{9}$

$$t(x)-\frac{1}{3}=-\frac{1}{9}(x-3)$$

$$t(x)=-\frac{1}{9}x+\frac{3}{9}+\frac{1}{3} \Rightarrow \boxed{t(x)=-\frac{1}{9}x+\frac{2}{3}}$$