**Restrictions on Logarithms – Extra Practice**

1. $log\_{3x^{2}}(1-2x)$
2. $log\_{5-x}(2x+1)$
3. $log\_{-x+10}(x^{2}-100)$
4. $log\_{5x-2}5x^{2}$

SOLUTIONS :

1) $\left]-\infty ,-\frac{1}{\sqrt{3}}\right[∪\left]-\frac{1}{\sqrt{3}},0\right[∪\left]0,\frac{1}{2}\right[$ 2) $\left]-\frac{1}{2},4\right[∪\left]4,5\right[$
3) $\left]-\infty ,-10\right[$ 4) $\left]\frac{2}{5},\frac{3}{5}\right[∪\left]\frac{3}{5},\infty \right[$