Resolver las siguientes **ecuaciones de 1er grado con denominadores** y comprobar la solución:

a) $3-\frac{5x-1}{10}=\frac{x-1}{5}-\frac{x-3}{2}$ *(Soluc: x=9)*

b) $\frac{5-x}{15}-\frac{9}{5}=-x-\frac{1-x}{3}$ *(Soluc: x=17/9)*

c) $\frac{x+8}{6-x}=13$ *(Soluc: x=5)*

d) $\frac{3(x-2)}{4}-\frac{2(x-3)}{3}=\frac{x}{6}-\frac{3x-6}{4}$ *(Soluc: x=3/2)*

e) $\frac{x-2}{3-x}=-\frac{5}{4}$ *(Soluc: x=7)*

f) $x=\frac{x}{5}+\frac{x}{3}+3\left(\frac{x}{3}-\frac{x}{5}\right)+1$ *(Soluc: x=15)*

g) $\frac{1}{3}=\frac{\frac{3}{5}-x}{1+\frac{3}{5}x}$ *(Soluc: x=2/9)*

h) $4-\frac{7-x}{12}=\frac{5x}{3}-\frac{5-3x}{4}$ *(Soluc: x=2)*

i) $x-\frac{12x+1}{3}=2x+1-\frac{15x+4}{3}$ *(Soluc: Se trata de una identidad)*

j) $\frac{2x+1}{3x-6}=\frac{3}{2}$ *(Soluc: x=4)*

k) $\frac{x}{2}-\frac{6-x}{4}=x+1$ *(Soluc: x=-10)*

l) $\frac{1+5x}{4}-\frac{3-x}{6}=1-2x-\frac{8x-2}{9}$ *(Soluc: x=53/155)*

m) $\frac{6x+1}{11}=\frac{2x-3}{7}$ *(Soluc: x=-2)*

n) $x+\frac{3(x-5)}{2}=3+\frac{5x-21}{2}$ *(Soluc: Se trata de una identidad)*

o) $\frac{3(x-3)}{2}+\frac{2x}{3}-2x=\frac{3(2x-1)}{9}-\frac{1}{6}$ *(Soluc: x=-8)*

p) $\frac{1+96\frac{1}{480}}{96x}=\frac{1}{1600}$ *(Soluc: x=20)*

q) $1-\frac{2}{3}(x-3)=2-\frac{1}{4}(3x-4)$ *(Soluc: x=0)*

r) $2-4\left(\frac{2x}{7}+\frac{1}{7}\right)=\frac{3}{2}-x$ *(Soluc: x=-1/2)*

s) $5x-3\left(3-\frac{x}{4}\right)=\frac{7x}{2}-3$ *(Soluc: x=8/3)*

t) $5\left(\frac{2x}{3}-\frac{3x}{5}\right)+1=2x-2(x-1)$ *(Soluc: x=3)*

u) $\frac{1}{2}\left(\frac{x}{3}-\frac{x}{2}\right)+\frac{1}{9}=\frac{1}{2}\left(\frac{1}{2}-\frac{x}{3}\right)$

v) $\frac{2x}{3}-5\left(\frac{x}{12}+\frac{1}{4}\right)=3-2\left(1-\frac{x}{6}\right)$ *(Soluc: x=-27)*

w) $3\left(\frac{11x}{6}-x\right)-4=2x-3\left(1-\frac{x}{6}\right)$