* Solve $\frac{1}{3y} + \frac{y}{6} = \frac{1}{y}$

Multiply both sides by LCM → $3y, 6, y$ (to cancel out denominators)

$3y, 2\cdot 3, y$

$LCM = 2 \cdot 3 \cdot y = 6y$

$$\left(\frac{6y}{1}\right)\left(\frac{1}{3y} + \frac{y}{6}\right) = \left(\frac{1}{y}\right)\left(\frac{6y}{1}\right)$$

$$\frac{2\cdot 1}{\cancel{6y}} \cdot \frac{1}{\cancel{3y}} + \frac{\cancel{6y}}{1} \cdot \frac{y}{\cancel{6}}$$

$$2 + y^2 = 6$$
$$-6 \quad -6$$

$$y^2 - 4 = 0$$
$$(y+2)(y-2) = 0$$

$y+2=0$ $\quad$ $y-2=0$

$-2 \ -2$ $\quad$ $+2 \ +2$

$y = -2$ $\quad$ $y = 2$

$$\boxed{y = -2, 2} \checkmark$$

$3y$	y
$3(-2)$	-2
-6	

throw out any answer that causes the original equation to be undefined