

Ex. 4

LCD: 28

$$b. \quad \frac{1}{27} y^2 \cdot 28 = y \cdot 28 - \frac{1}{28} \cdot 28$$

$$4y^2 = 28y - 1$$

write in
standard form

$$4y^2 - 28y + 1 = 0$$

$$a=4 \quad b=-28 \quad c=1$$

$$x = \frac{-(-28) \pm \sqrt{(-28)^2 - 4(4)(1)}}{2(4)} = \frac{28 \pm \sqrt{784 - 16}}{8}$$

$$= \frac{28 \pm \sqrt{768}}{8}$$

$$= \frac{28 \pm 16\sqrt{256 \cdot 3}}{8}$$

$$\rightarrow = \frac{28 \pm 16\sqrt{3}}{8} = \frac{1}{8} (7 \pm 4\sqrt{3})$$

$$= \frac{7 \pm 4\sqrt{3}}{2}$$