

September 9, 2015

Quiz #3 → 5 Bonus Points for M.A.S.G!
 125

Sep 9-9:50 AM

#2)

$$\left(\frac{3x^{1/2}y}{2^{1/3}}\right)^{-1} \cdot \left(\frac{6x^{1/2}z}{y^{-1/3}}\right)^2$$

$$\frac{3^{-1} \cdot (x^{1/2})^{-1} \cdot y^{-1}}{(2^{1/3})^{-1}} \cdot \frac{6^2 \cdot (x^{1/2})^2 \cdot z^2}{(y^{-1/3})^2}$$

$$\frac{3x^{1/2}y}{2^{1/3}} \cdot \frac{36x^1z^2y^{2/3}}{1}$$

$$12x^{1+1/2}z^{2+2/3}y^{2/3-1}$$

$$12x^{3/2}z^{8/3}y^{-1/3}$$

$$\frac{12x^{3/2}z^{8/3}}{y^{1/3}}$$

$1 - \frac{1}{3} = \frac{3-1}{3} = \frac{2}{3}$
 $\frac{1}{3} + \frac{2}{3} = \frac{1+2}{3} = \frac{3}{3} = 1$
 $\frac{2}{3} - \frac{1}{3} = \frac{2-1}{3} = \frac{1}{3}$

Sep 9-10:24 AM

8.2

Product Rule for Radicals

$$\sqrt[n]{ab} = \sqrt[n]{a} \cdot \sqrt[n]{b}$$

\downarrow
 $(ab)^{1/n}$

$$\sqrt{50} = \sqrt{25 \cdot 2}$$

$$= \sqrt{25} \cdot \sqrt{2}$$

$$= 5\sqrt{2} \leftarrow \text{simplified}$$

$$\sqrt{33} = \sqrt{3 \cdot 11} = \sqrt{3} \cdot \sqrt{11}$$

simplified

Sep 9-10:34 AM