

a) $\frac{4}{7}$

b) $\sqrt{72} \rightarrow \sqrt{36 \cdot 2} = 6\sqrt{2}$

$\sqrt{9} \cdot \sqrt{8}$
 $3\sqrt{8}$
 $3\sqrt{4} \cdot \sqrt{2}$
 $3 \cdot 2 \cdot \sqrt{2}$
 $6\sqrt{2}$

$5\sqrt{2} \cdot 4\sqrt{3}$
 $20\sqrt{6}$

$\frac{2}{\sqrt{5}} \times \frac{\sqrt{5}}{\sqrt{5}} = \frac{2\sqrt{5}}{(\sqrt{25})} = \frac{2\sqrt{5}}{5}$

Oct 17-9:46 AM

$(x^4)(x^{-3}) = \frac{x^4}{x^3} = x^{4-3} = x^1 = x$

$x^{-1} = \frac{1}{x^1} = \frac{1}{x}$

Oct 17-9:50 AM

$(b^3e^2)(b^4e^{-2})$

a) $\sqrt{8} = \sqrt{4 \cdot 2} = 2\sqrt{2}$

b) $\sqrt{45} = \sqrt{9 \cdot 5} = 3\sqrt{5}$

c) $\sqrt[3]{24} = \sqrt[3]{8 \cdot 3} = 2\sqrt[3]{3}$

d) $\sqrt[3]{64} = 4$

e) $\sqrt[5]{32} = 2$

f) $\sqrt[4]{81} = 3$

$b^7e^0 = b^7 \cdot 1 = b^7$

Oct 17-9:51 AM

$16^{\frac{1}{2}} = \sqrt{16} = 4$

$8^{\frac{1}{3}} = \sqrt[3]{8} = 2$

TIBO

Oct 17-9:55 AM

$16^{\frac{2}{3}} = \sqrt[3]{16^2}$

#4. MIXED \rightarrow ENTIRE

$3\sqrt{6} \cdot 3^2 \cdot \sqrt{6} = \sqrt{54}$

$\sqrt{9} \cdot \sqrt{6} = \sqrt{54}$

c) $2\sqrt[3]{3} \cdot 2^2 \cdot \sqrt[3]{3} = \sqrt[3]{8 \cdot 3 \cdot 3} = \sqrt[3]{24}$

Oct 17-10:02 AM

USE EXPONENTS

$\sqrt{6} = 6^{\frac{1}{2}}$

TIBO

Oct 17-10:04 AM

$$4^{\frac{3}{2}} \cdot 4^{\frac{1}{2}} = 4^{\frac{4}{2}} = 4^2 = 16$$

$$x^4 \cdot x^{-3} = x^{4+(-3)} = x^1$$

Oct 17-10:06 AM

$$\left(\frac{a}{b}\right)^3 \cdot \frac{a}{b^3} = \frac{a^2}{b^3}$$

$$\frac{a}{b} \cdot \frac{a}{b} \cdot \frac{a}{b} = \frac{a^3}{b^3}$$

$$3) \left(\frac{2x^4}{5y^3}\right)^{-3} \cdot \left(\frac{5y^3}{2x^4}\right)^{\frac{3}{2} \cdot 2}$$

$$\frac{125y^9}{8x^{12}} \cdot \frac{1}{2} \left(\frac{3}{4}\right)^{-2} \left(\frac{3}{4}\right)^{-2+5}$$

$$\frac{x^2}{x^5} \cdot \frac{1}{x} \cdot \frac{1}{\left(\frac{3}{4}\right)^5} \left(\frac{3}{4}\right)^{\frac{2}{4}}$$

$$10) \left(5^2 \cdot 4^{-3}\right)^2 = \frac{1}{(5^2 \cdot 4^{-3})^2}$$

$$\frac{1}{5^4 \cdot 4^{-6}} = \frac{4^6}{5^4 \cdot 16}$$

Oct 17-10:08 AM

1. a) 7

b) 8

c) 12

d) 1.2

$$2^3 = \cancel{8}$$

$$= \cancel{8}$$

$$= 8$$

Oct 17-10:32 AM