

$x^{1/2} = \sqrt[2]{x^1}$	Write the following expressions using only positive integer powers	
	a) $x^{3/2} = \sqrt[2]{x^3}$	b) $x^{4/3} = \sqrt[3]{x^4}$
	c) $1x^{-1} = \frac{1}{x^1}$	d) $1x^{-3} = \frac{1}{x^3}$
	e) $x^{-2/3} = \frac{1}{x^{2/3}} = \frac{1}{\sqrt[3]{x^2}}$	f) $x^{-3/2} = \frac{1}{x^{3/2}} = \frac{1}{\sqrt{x^3}}$
	Write the following expressions in the form kx^a (Simplify)	
$\sqrt{x^4} = x^{4/2}$ $4x^2 \cdot x^{1/2} = 4x^{5/2}$	a) $\sqrt{16x^5} = 4x^{5/2}$	b) $\sqrt[3]{27x^7} = 3x^{7/3}$
	c) $\sqrt[3]{\frac{12}{x^5}} = \frac{(12)^{1/3}}{x^{5/3}} = \frac{(12)^{1/3} \cdot x^{-5/3}}{1}$	d) $\frac{5x}{\sqrt{20x^5}} = \frac{5x}{2\sqrt{5}x^{5/2}} = \frac{5x \cdot x^{-5/2}}{2\sqrt{5}} = \frac{5x^{-3/2}}{2\sqrt{5}} = \frac{5 \cdot 5^{-1/2} \cdot x^{-3/2}}{2\sqrt{5}} = \frac{5^{1-1/2} \cdot x^{-3/2}}{2} = \frac{5^{1/2} \cdot x^{-3/2}}{2} = \frac{\sqrt{5} \cdot x^{-3/2}}{2}$

$$1 + \frac{-5}{2}$$

$$\frac{2}{2} + \frac{-5}{2}$$

$$\frac{2}{12} \div 7$$

$$\frac{\cancel{2}}{12} \cdot \frac{1}{\cancel{2}}$$

$$\frac{5^{1/2} \cdot x^{-3/2}}{2} = \frac{\sqrt{5} \cdot x^{-3/2}}{2}$$