

Use algebra to rewrite the functions below in the form $f(x)=a \cdot x^n$

Remember: $\frac{1}{x} = x^{-1}$ $\sqrt[n]{x} = x^{1/n}$ $\frac{1}{\sqrt[n]{x}} = x^{-1/n}$

$$\sqrt{x} = x^{1/2}$$

$$\sqrt[3]{x} =$$

$$\sqrt[5]{x} =$$

$$\sqrt[6]{x} =$$

$$\frac{1}{x^7} = x^{-7}$$

$$\frac{1}{x^2} =$$

$$\frac{5}{r^3} =$$

$$\frac{7}{9^8} =$$

$$\frac{-3}{r^4} =$$

$$\frac{1}{\sqrt[3]{x}} = x^{-1/3}$$

$$\frac{2}{\sqrt[5]{x}} =$$

$$\frac{4}{\sqrt[9]{x}} =$$

$$\frac{-2}{\sqrt[3]{x}} =$$

$$\frac{-3}{\sqrt[4]{x}} =$$

$$\frac{4}{\sqrt{x}} =$$

$$\frac{7}{\sqrt[5]{x^6}} = 7x^{-6/5}$$

$$\frac{8}{\sqrt[4]{x^3}} =$$

$$\frac{-9}{\sqrt[7]{x^4}} =$$

$$\frac{10}{\sqrt[4]{x^5}} =$$

$$\frac{20}{3\sqrt[4]{x^7}} =$$

$$\frac{43}{7\sqrt{x}} =$$

Write as a sum of power functions:

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

$$\frac{4x^3 + \sqrt{x}}{x^2} =$$

$$\frac{5\sqrt{x} + x^3}{\sqrt[3]{x}} =$$

$$\frac{x^4 + 3x^2}{\sqrt{x}} =$$