

Division of Algebraic Expressions Ex 8.3 Q4

## Answer:

$$\frac{-x^{6} + 2x^{4} + 4x^{3} + 2x^{2}}{\sqrt{2}x^{2}}$$

$$= \frac{-x^{6}}{\sqrt{2}x^{2}} + \frac{2x^{4}}{\sqrt{2}x^{2}} + \frac{4x^{3}}{\sqrt{2}x^{2}} + \frac{2x^{2}}{\sqrt{2}x^{2}}$$

$$= \frac{-1}{\sqrt{2}}x^{(6-2)} + \sqrt{2}x^{(4-2)} + 2\sqrt{2}x^{(3-2)} + \sqrt{2}x^{(2-2)}$$

$$= \frac{-1}{\sqrt{2}}x^{4} + \sqrt{2}x^{2} + 2\sqrt{2}x + \sqrt{2}$$

Division of Algebraic Expressions Ex 8.3 Q5

## Answer:

$$\frac{5z^{3} - 6z^{2} + 7z}{2z} = \frac{5z^{3}}{2z} - \frac{6z^{2}}{2z} + \frac{7z}{2z} 
= \frac{5}{2}z^{(3-1)} - 3z^{(2-1)} + \frac{7}{2} 
= \frac{5}{2}z^{2} - 3z + \frac{7}{2}$$

Division of Algebraic Expressions Ex 8.3 Q6

## Answer:

$$\frac{\sqrt{3}a^{4} + 2\sqrt{3}a^{3} + 3a^{2} - 6a}{3a} = \frac{\sqrt{3}a^{4}}{3a} + \frac{2\sqrt{3}a^{3}}{3a} + \frac{3a^{2}}{3a} - \frac{6a}{3a} = \frac{1}{\sqrt{3}}a^{(4-1)} + \frac{2}{\sqrt{3}}a^{(3-1)} + a^{(2-1)} - 2 = \frac{1}{\sqrt{3}}a^{3} + \frac{2}{\sqrt{3}}a^{2} + a - 2$$

\*\*\*\*\*\*\*\*\* END \*\*\*\*\*\*\*