Divide Polynomial by Monomial
_or_ Perform each Division

$$\frac{24x^5+12x^3-18x^2}{6x^2}$$

$$\frac{24x^5}{6x^2}+\frac{12x^3}{6x^2}-\frac{18x^2}{6x^2}$$

$$\boxed{4x^3 + 2x - 3}$$

$$\frac{-28y^4+12y^2-4y}{4y}$$

$$\frac{-28y^4}{4y}+\frac{12y^2}{4y}-\frac{4y}{4y}$$

$$\boxed{-7y^3 + 3y - 1}$$

$$\frac{12x^8+30x^5-18x^3+x}{-6x}$$

$$\frac{12x^8}{-6x}+\frac{30x^5}{-6x}-\frac{18x^3}{-6x}+\frac{x}{-6x}$$

$$\boxed{-2x^7 - 5x^4 + 3x^2 - \frac{1}{6}}$$

$$\frac{35p^4+17p^3}{10p}$$

$$\frac{35p^4}{10p} + \frac{17p^3}{10p}$$

$$\boxed{\frac{7p^3}{2} + \frac{17p^2}{10}}$$

$$\frac{35x^2-21x-7}{7}$$

$$\frac{35x^2}{7}-\frac{21x}{7}-\frac{7}{7}$$

$$\boxed{5x^2 - 3x - 1}$$

$$\frac{30x^2-20x+2}{x}$$

$$\frac{30x^2}{x}-\frac{20x}{x}+\frac{2}{x}$$

$$\boxed{30x - 20 + \frac{2}{x}}$$

$$\frac{12q^8r^5-20q^3r+24q^2r-8qr}{4q^2r}$$

$$\frac{\overset{3}{12}q^{\overset{6}{8}}r^{\overset{4}{5}}}{4q^2r} - \frac{\overset{5}{20}q^3r}{4q^2r} + \frac{\overset{6}{24}q^2r}{4q^2r} - \frac{\overset{2}{8}qr}{4qr}$$

$$\boxed{3q^6r^4 - 5q + 6 - \frac{2}{q}}$$

1. $$\frac{32k^4+72k^2-12k}{8k^3}$$

$$\frac{\overset{4}{32}k^4}{8k^3} + \frac{\overset{9}{72}k^2}{8k^3} - \frac{\overset{3}{12}k}{\underset{2}{8}k^{3}{}_{2}}$$

$$\boxed{4k + \frac{9}{k} - \frac{3}{2k^2}}$$

2) $$\frac{24x^7-18x^5+6x^3}{-3x^2}$$

$$\frac{\overset{8}{24}x^{\overset{5}{7}}}{-3x^2} - \frac{\overset{6}{18}x^{\overset{3}{5}}}{-3x^2} + \frac{\overset{2}{6}x^{3}}{-3x^2}$$

$$\boxed{-8x^5 + 6x^3 - 2x}$$

3) $$\frac{10x^{10}-6x^5+8x^3-x}{2x}$$

$$\frac{\overset{5}{10}x^{\overset{9}{10}}}{2x} - \frac{\overset{3}{6}x^{\overset{4}{5}}}{2x} + \frac{\overset{4}{8}x^{\overset{2}{3}}}{2x} - \frac{x}{2x}$$

$$\boxed{5x^9 - 3x^4 + 4x^2 - \frac{1}{2}}$$