

$$\begin{aligned}
\frac{9a^4b - 7a^3b^2 + 3a^2b}{-3a^2b} &= \frac{9a^4b}{-3a^2b} - \frac{7a^3b^2}{-3a^2b} + \frac{3a^2b}{-3a^2b} \\
&= -\frac{9}{3}a^{4-2}b^{1-1} + \frac{7}{3}a^{3-2}b^{2-1} - \frac{3}{3}a^{2-2}b^{1-1} \\
&= -3a^2b^0 + \frac{7}{3}a^1b^1 - 1a^0b^0 \\
&= -3a^2 \cdot 1 + \frac{7}{3}ab - 1 \cdot 1 \cdot 1 \\
&= -3a^2 + \frac{7}{3}ab - 1
\end{aligned}$$