5. $\frac{24a^6b^2 + 32a^5b^3 + 40a^4b^4}{-8a^4b^2} = \frac{24a^6b^2}{-8a^4b^2} + \frac{32a^5b^3}{-8a^4b^2} + \frac{40a^4b^4}{-8a^4b^2} = -3a^2 - 4ab - 5b^2$

6. $\frac{14a^4b^3 + 49a^2b}{7ab} = \frac{14a^4b^3}{7ab} + \frac{49a^2b}{7ab} = 2a^3b^2 + 7a$

7. $\frac{35x^2y^3z^4 + 45x^4y^3z^2}{-5x^2y^2z} = \frac{35x^2y^3z^4}{-5x^2y^2z} + \frac{45x^4y^3z^2}{-5x^2y^2z} = -7yz^3 - 9x^2yz$

8. $\frac{36a^3b^4c^6 + 60a^2b^5c^7}{-12a^2b^4c^6} = \frac{36a^3b^4c^6}{-12a^2b^4c^6} + \frac{60a^2b^5c^7}{-12a^2b^4c^6} = -3a - 5bc$

9. $\frac{24r^3s^2 + 30r^2s^2 - 42r^2s^3}{6r^2s^2} = \frac{24r^3s^2}{6r^2s^2} + \frac{30r^2s^2}{6r^2s^2} + \frac{-42r^2s^3}{6r^2s^2} = 4r + 5 - 7s$

10. $\frac{9x^2yz + 36xy^2z^3 - 45xyz^5}{-9xyz} = \frac{9x^2yz}{-9xyz} + \frac{36xy^2z^3}{-9xyz} + \frac{-45xyz^5}{-9xyz} = -x - 4yz^2 + 5z^4$

11. $(8a^7b^3 + 28a^6b^4 - 16a^5b^5 - 4a^4b^6) \div 4a^4b^3$

$= \frac{8a^7b^3}{4a^4b^3} + \frac{28a^6b^4}{4a^4b^3} + \frac{-16a^5b^5}{4a^4b^3} + \frac{-4a^4b^6}{4a^4b^3} = 2a^3 + 7a^2b - 4ab^2 - b^3$

12. $(3x^3yz^2 + 15x^5y^2z^3 + 6x^4yz^3 - 18x^6y^3z) \div 3x^3yz$

$= \frac{3x^3yz^2}{3x^3yz} + \frac{15x^5y^2z^3}{3x^3yz} + \frac{6x^4yz^3}{3x^3yz} + \frac{-18x^6y^3z}{3x^3yz}$

$= z + 5x^2yz^2 + 2xz^2 - 6x^3y^2$

13. $\frac{a^2y - 2ay^2}{ay} = \frac{a^2y}{ay} + \frac{-2ay^2}{ay} = a - 2y$

$\frac{a^2y - 2ay^2}{-ay} = \frac{a^2y}{-ay} + \frac{-2ay^2}{-ay} = -a + 2y$

14. $\frac{9x^2y^2 + 15xy^2}{3xy^2} = \frac{9x^2y^2}{3xy^2} + \frac{15xy^2}{3xy^2} = 3x + 5$

$\frac{9x^2y^2 + 15xy^2}{-3xy^2} = \frac{9x^2y^2}{-3xy^2} + \frac{15xy^2}{-3xy^2} = -3x - 5$

15. $\frac{-xz^3 - 3xz + x^2z^2}{-xz} = \frac{-xz^3}{-xz} + \frac{-3xz}{-xz} + \frac{x^2z^2}{-xz} = z^2 + 3 - xz$

$\frac{-xz^3 - 3xz + x^2z^2}{xz} = \frac{-xz^3}{xz} + \frac{-3xz}{xz} + \frac{x^2z^2}{xz} = -z^2 - 3 + xz$