

## 5-2 Adding and Subtracting Rational Expressions Worksheet

Directions – Simplify each expression. Show your work!

1. $\frac{5}{6ab} - \frac{7}{8a}$	2. $\frac{5}{12x^4y} - \frac{1}{5x^2y^3}$	3. $\frac{1}{6c^2d} + \frac{3}{4cd^3}$
4. $\frac{4m}{3mn} + 2$	5. $2x - 5 - \frac{x-8}{x+4}$	6. $\frac{4}{x-3} + \frac{9}{x-5}$
7. $\frac{16}{x^2-16} + \frac{2}{x+4}$	8. $\frac{2-5m}{m-9} + \frac{4m-5}{9-m}$	9. $\frac{y-5}{y^2-3y-10} + \frac{y}{y^2+y-2}$
10. $\frac{5}{2x-12} - \frac{20}{x^2-4x-12}$	11. $\frac{2p-3}{p^2-5p+6} - \frac{5}{p^2-9}$	12. $\frac{1}{5n} - \frac{3}{4} + \frac{7}{10n}$
13. $\frac{2a}{a-3} - \frac{2a}{a+3} + \frac{36}{a^2-9}$	14. $\frac{\frac{2}{x-y} + \frac{1}{x+y}}{\frac{1}{x-y}}$	15. $\frac{\frac{r+6}{r} - \frac{1}{r+2}}{\frac{r^2+4r+3}{r^2+2r}}$