

## Unit 3 Assignment 4 - Add and Subtract

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each expression.**

1)  $\frac{m+3}{9m+36} + \frac{m-5}{9m+36}$

2)  $\frac{x-6}{4x^2+22x+24} + \frac{x+5}{4x^2+22x+24}$

3)  $\frac{3r-1}{r^2-8r+12} - \frac{r+1}{r^2-8r+12}$

4)  $\frac{b+2}{3b^2-22b+24} - \frac{b+5}{3b^2-22b+24}$

5)  $\frac{6}{b-5} + \frac{4}{5b+1}$

6)  $\frac{6}{3n^2+12n} + \frac{4}{2n}$

7)  $\frac{4}{3} - \frac{x-2}{x+5}$

8)  $\frac{x-5}{5x+5} - \frac{4}{4x}$

9)  $\frac{5}{m-3} - \frac{m-4}{m-5}$

10)  $\frac{6n+6}{2n^2-6n-20} + \frac{4}{2}$

11)  $\frac{6}{r^2-2r-15} + \frac{2}{2r}$

12)  $\frac{6}{b-5} + \frac{5}{3b+2}$

13)  $\frac{6x}{2x} + \frac{4x+6}{3x^2+30x+72}$

14)  $\frac{4}{n-1} + \frac{5}{n-4}$

15)  $\frac{5}{2} + \frac{p+3}{9p^2-15p}$

16)  $\frac{6k}{5k+6} - \frac{3k}{2k-5}$

17)  $\frac{5a}{a+1} + \frac{5}{a-6}$

18)  $\frac{5}{5r+25} - \frac{3}{r-1}$

19)  $\frac{2}{n-3} + \frac{3n}{n+1}$

20)  $\frac{3}{5} - \frac{n-3}{n^2-3n-18}$