

4-4 Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{4a}{45a^2 - 45a} + \frac{3a - 2}{45a^2 - 45a}$

2) $\frac{4r + 4}{12r + 12} + \frac{r + 5}{12r + 12}$

3) $\frac{4n}{15n^2 - 18n} - \frac{6n}{3n}$

4) $\frac{3}{n^2 + 7n + 10} - 4$

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

6) $\frac{k + 3}{k^2 - 2k - 15} + 3k$

7) $\frac{4}{2x^2 - 6x} - \frac{4}{x + 4}$

8) $\frac{6v}{3v^2 + 21v + 18} + \frac{5v}{3v}$

9) $\frac{3x}{x^2 + 6x + 8} - \frac{7}{x^2 - 3x - 10}$

10) $\frac{x + 4}{x^2 - x - 6} + \frac{x + 1}{x^2 + 3x - 18}$

Review: Expand completely.

11) $(3b + a)^4$

12) $(2x - y)^4$