

Adding and Subtracting Rational Expressions

Period _____ Group _____

Simplify each expression.

1) $\frac{m-4n}{24m} + \frac{m+5n}{24m}$

2) $\frac{x+5y}{12x^4} + \frac{2}{12x^4}$

3) $\frac{a-3}{18a^2-6a} + \frac{3a-3}{18a^2-6a}$

4) $\frac{n+1}{12n+24} + \frac{n-1}{12n+24}$

5) $\frac{k-5}{k^2-9} + \frac{k+4}{k^2-9}$

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

7) $\frac{x-3}{x^2+8x+15} + \frac{x-4}{x^2+8x+15}$

8) $\frac{n+3}{4n^2-8n-60} + \frac{2n-5}{4n^2-8n-60}$

9) $\frac{2p-4}{6p^2+12p-144} + \frac{p+1}{6p^2+12p-144}$

10) $\frac{m+5}{m^2+4m-12} + \frac{m+4}{m^2+4m-12}$

11) $\frac{x+6y}{25y} - \frac{4x}{25y}$

12) $\frac{a-4b}{18a^2b} - \frac{2a+b}{18a^2b}$

13) $\frac{4}{8r^2+4r} - \frac{5r+5}{8r^2+4r}$

14) $\frac{m+2}{30m^3-12m^2} - \frac{m-1}{30m^3-12m^2}$

15) $\frac{2x}{x^2-x-12} - \frac{2x}{x^2-x-12}$

16) $\frac{n-5}{36n^2-24n} - \frac{n-6}{36n^2-24n}$

17) $\frac{b+3}{2b^3+4b^2-48b} - \frac{b+4}{2b^3+4b^2-48b}$

18) $\frac{v-1}{6v^3+36v^2+30v} - \frac{v-2}{6v^3+36v^2+30v}$

19) $\frac{x+5}{2x^2+3x-20} - \frac{2x-5}{2x^2+3x-20}$

20) $\frac{3x}{45x^3-36x^2-108x} - \frac{6}{45x^3-36x^2-108x}$

21) $\frac{2k}{k-3} - \frac{2}{k+1}$

22) $\frac{5}{3a} - \frac{2a}{5a-5}$