Intermediate Algebra Name_____

Add & Subtract Rational Expressions Practice Extra Credit

Date_____ Period____

Adding: Like Terms

1) $\frac{x-y}{4x}+\frac{2}{4x}$

A) $\frac{8x^2+x-y+2}{4x}$

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

C) $\frac{5x-y+1}{4x+2}$

D) $\frac{x-y+2}{4x}$

2) $\frac{a+2b}{4ab^3}+\frac{a-b}{4ab^3}$

A) $\frac{a+b}{8ab^3}$ B) $\frac{2a+b}{4ab^3}$

C) $\frac{-a-2b}{16a^2b^5}$ D) $\frac{a+b}{4ab^3}$

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

A) $\frac{3n-2}{3n+3}$

B) $\frac{3n-1}{3n+3}$

C) $\frac{3n^2-5n-2}{9n^2+18n+9}$

D) $\frac{9n^2+10n+7}{3n^2-3n-6}$

4) $\frac{b+1}{2(b-2)}+\frac{b-3}{2(b-2)}$

A) $\frac{12b^2+36b-8}{3b^2+12b+9}$ B) $\frac{b-1}{b-2}$

C) $\frac{-4b+5+3b^2}{3b^2-3b+2}$ D) $\frac{b+3}{2b}$

5) $\frac{x-3}{3x-3}+\frac{2x-1}{3x-3}$

A) $\frac{13x^2-26x+12}{6x^2-9x+3}$

B) $\frac{4x^2-4x+1}{9x^2-18x+9}$

C) $\frac{2x-2}{2x-1}$

D) $\frac{3x-4}{3x-3}$

6) $\frac{v+2}{v^2+5v+6}+\frac{v-2}{v^2+5v+6}$

A) $\frac{v+5}{v-2}$

B) $\frac{v+4}{v-2}$

C) $\frac{6v+10+v^2}{v^2+6v+4}$

D) $\frac{2v}{v^2+5v+6}$

Subtracting: Like Terms

7) $\frac{2}{6n^3} - \frac{m-2n}{6n^3}$

A) $\frac{1-n}{2m^2}$ B) $\frac{1-2n}{4m^2}$

C) $\frac{2-m+2n}{6n^3}$ D) $\frac{3+2n}{6n^3}$

8) $\frac{x+2y}{6y^3} - \frac{x+2y}{6y^3}$

A) 0 B) $\frac{x}{6y^3}$

C) $\frac{x+2}{x}$ D) $\frac{x+2y+1}{2y}$

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

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

B) $\frac{2k+1}{3k^2+4k+1}$

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

D) $\frac{1}{3k+1}$

10) $\frac{2p}{(p-2)(p+1)} - \frac{2}{(p-2)(p+1)}$

A) $\frac{3p-2}{p}$

B) $\frac{p-p^3+2p^2+2}{-p^2+p+2}$

C) $\frac{2p-2}{p^2-p-2}$

D) $\frac{2-p^3+p^2}{-p^2+p+2}$

Subtracting: Unlike Terms

11) $\frac{3}{2x} - \frac{3x}{2}$

A) $\frac{3-3x^2}{2x}$ B) $\frac{-2x^2+5}{2x}$

C) $\frac{4-3x}{2(x-1)}$ D) $\frac{15}{4}$

12) $\frac{3u}{3u^3} - \frac{u-v}{2}$

A) $\frac{3vu^2-2}{3u^2}$ B) $\frac{2-u^3+u^2v}{2u^2}$

C) $\frac{2v}{3u^2}$ D) $\frac{2+vu^2}{2u^2}$

13) $\frac{3m}{2m} - \frac{m-1}{2m(m-2)}$

A) $\frac{5m^2-11m+1}{2m(m-2)}$

B) $\frac{m-5}{2(m-1)}$

C) $\frac{m-1}{m(m-2)}$

D) $\frac{3m^2-7m+1}{2m(m-2)}$

14) $\frac{2a}{3} - \frac{2a}{2b^3}$

A) $\frac{2ab^3-3a}{3b^3}$

B) $\frac{a}{3-2b^3}$

C) $\frac{a^2}{3b^3}$

D) $\frac{4b^3a+2b^3-3a}{6b^3}$

15) $\frac{3x}{3} - \frac{2x}{x-3}$

A) $\frac{3x+1}{3}$ B) $\frac{x^2-4x}{x-3}$

C) x D) $\frac{x^2-5x}{x-3}$

Adding: Unlike Terms

16) $\frac{6b}{4} + \frac{4}{2b}$

A) $\frac{6b^2+ba+8-2a}{4b}$

B) $\frac{3b^2+4-a}{2b}$

C) $\frac{3b^2+4}{2b}$

D) $\frac{3b^2+ba+4-a}{2b}$

17) $\frac{3b}{b+4} + \frac{3b}{b+1}$

A) $\frac{4b^3+20b^2+6+b}{2b(b+5)}$

B) $\frac{4b^2+1}{2b}$

C) $\frac{6+7b}{2b^2+10b+3}$

D) $\frac{6b^2+15b}{(b+1)(b+4)}$

18) $\frac{4v}{3v+3} + \frac{v+1}{2}$

A) $\frac{11v+5}{6(v+1)}$ B) $\frac{4v+3}{3v+5}$

C) $\frac{5v+2}{3v+5}$ D) $\frac{14v+3v^2+3}{6(v+1)}$

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