

Add and Subtract Rational Expressions

Name _____

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Simplify each expression.

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

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

3) $\frac{6n}{9n-15} + \frac{6}{2n}$

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

5) $\frac{3}{15n-9} - \frac{2}{2n}$

6) $4 + \frac{v+2}{6v^2+30v}$

7) $4x + \frac{5}{x^2+4x-12}$

8) $\frac{6r}{r+4} - \frac{5}{3r-6}$

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

$$10) \frac{2n}{3n} + \frac{6}{10n^2 + 8n}$$

$$11) \frac{p+1}{p-6} + \frac{4p}{5}$$

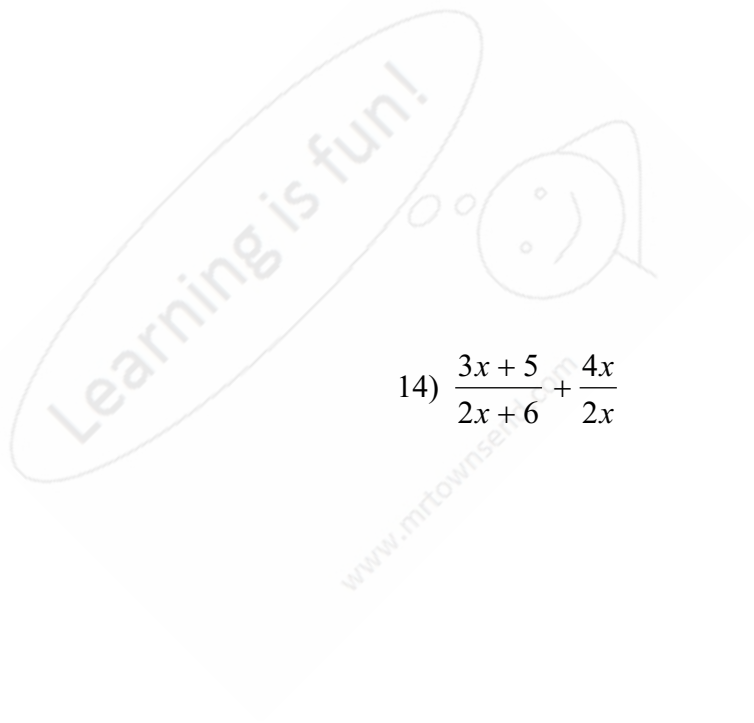
$$12) \frac{5v}{6v^2} - \frac{4}{v-2}$$

$$13) \frac{3}{n-5} + \frac{2}{n-1}$$

$$14) \frac{3x+5}{2x+6} + \frac{4x}{2x}$$

$$15) \frac{4}{b-1} - \frac{6}{3}$$

$$16) \frac{x+1}{2x+4} + \frac{5x}{4x^2}$$



Answers to Add and Subtract Rational Expressions

$$1) \frac{-n - 10 - 3n^2}{(n - 5)(n + 1)}$$

$$5) \frac{-4n + 3}{n(5n - 3)}$$

$$8) \frac{18r^2 - 41r - 20}{3(r - 2)(r + 4)}$$

$$12) \frac{-19v - 10}{6v(v - 2)}$$

$$16) \frac{2x^2 + 7x + 10}{4x(x + 2)}$$

$$2) \frac{19x + 8}{5(x + 2)}$$

$$6) \frac{24v^2 + 121v + 2}{6v(v + 5)}$$

$$9) \frac{17n^2 - 10n}{(n - 2)(5n - 2)}$$

$$13) \frac{5n - 13}{(n - 5)(n - 1)}$$

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

$$7) \frac{4x^3 + 16x^2 - 48x + 5}{(x - 2)(x + 6)}$$

$$10) \frac{10n^2 + 8n + 9}{3n(5n + 4)}$$

$$14) \frac{7x + 17}{2(x + 3)}$$

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

$$11) \frac{-19p + 5 + 4p^2}{5(p - 6)}$$

$$15) \frac{-2b + 6}{b - 1}$$

