

Add and Subtract Rational Expressions

Name _____

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Simplify each expression.

1) $\frac{6}{3} + \frac{3m-6}{5m-6}$

2) $\frac{k-4}{3k^2-12k} - \frac{2}{2k}$

3) $\frac{4}{3} - \frac{4n}{3n-18}$

4) $\frac{4b}{b-4} - \frac{4}{b-1}$

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

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

7) $\frac{5}{3n} + \frac{3n+3}{3n^2+12n}$

8) $6x + \frac{x+1}{3x^2+18x+15}$

$$9) \frac{x+5}{3x-6} - \frac{5x}{x+3}$$

$$10) 3 - \frac{b+5}{2b-12}$$

$$11) \frac{n+5}{2n+1} + \frac{6}{4}$$

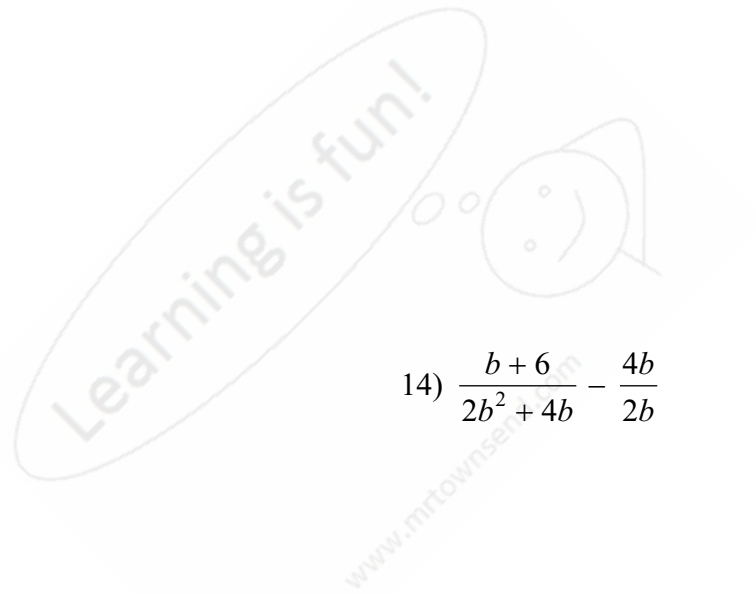
$$12) \frac{2m}{6} + \frac{6}{m+2}$$

$$13) \frac{4x}{5x+1} - \frac{6}{x+5}$$

$$14) \frac{b+6}{2b^2+4b} - \frac{4b}{2b}$$

$$15) \frac{v+3}{3v-6} - \frac{6v}{3}$$

$$16) \frac{5}{r+1} + \frac{2}{r-6}$$



Answers to Add and Subtract Rational Expressions

$$1) \frac{13m - 18}{5m - 6}$$

$$5) \frac{5x - 5}{3(x - 4)}$$

$$9) \frac{-14x^2 + 38x + 15}{3(x - 2)(x + 3)}$$

$$13) \frac{4x^2 - 10x - 6}{(x + 5)(5x + 1)}$$

$$2) -\frac{2}{3k}$$

$$6) \frac{11x^2 - 11x}{(x - 6)(x + 5)}$$

$$10) \frac{5b - 41}{2(b - 6)}$$

$$14) \frac{-4b^2 - 7b + 6}{2b(b + 2)}$$

$$3) -\frac{8}{n - 6}$$

$$7) \frac{8n + 23}{3n(n + 4)}$$

$$11) \frac{8n + 13}{2(2n + 1)}$$

$$15) \frac{-6v^2 + 13v + 3}{3(v - 2)}$$

$$4) \frac{4b^2 - 8b + 16}{(b - 4)(b - 1)}$$

$$8) \frac{18x^2 + 90x + 1}{3(x + 5)}$$

$$12) \frac{m^2 + 2m + 18}{3(m + 2)}$$

$$16) \frac{7r - 28}{(r - 6)(r + 1)}$$

