

## 6.2 Add and Subtract Rational Expressions

Period \_\_\_\_\_

**Simplify each expression.**

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

2)  $\frac{x-5y}{20yx^2} + \frac{x+6y}{20yx^2}$

3)  $\frac{x-5}{15(x+1)} + \frac{x+3}{15(x+1)}$

4)  $\frac{v+3}{6(v+4)} - \frac{v-1}{6(v+4)}$

5)  $\frac{5x-1}{4x^3(x-1)(2x-3)} + \frac{x+3}{4x^3(x-1)(2x-3)}$

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

7)  $\frac{3}{3x} + \frac{6x-2}{2x(x-6)}$

8)  $\frac{4}{2(p-3)} + \frac{6p}{p+4}$

$$9) \frac{n+1}{3n} - \frac{n+4}{3(n-1)}$$

$$10) \frac{4a}{3a} - \frac{5a-4}{3(2a-3)(a+5)}$$

$$11) \frac{3v}{v-4} - \frac{6}{5(v-5)}$$

$$12) \frac{5}{n-1} + \frac{6n}{3n+1}$$

$$13) \frac{4b}{2b+3} - \frac{2}{b+6}$$

$$14) \frac{3}{n-3} - \frac{3}{2n+4}$$

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

$$16) \frac{x+4}{2x^2-6x-20} + \frac{2}{5x^2}$$