

Multiplying Rational Expressions

Simplify each expression.

1. $\frac{2a}{3b} \cdot \frac{ab}{2c}$

2. $\frac{2x}{3y} \cdot \frac{xy^2}{2z}$

3. $\frac{3x}{2ab} \cdot \frac{ab}{3ca}$

4. $\frac{2b}{3c} \cdot \frac{ca}{2ba^2}$

5. $\frac{3a}{2bc} \cdot \frac{2c}{3a}$

6. $\frac{3b}{2c} \cdot \frac{ca}{3a}$

7. $\frac{3(a+b)}{2b} \cdot \frac{ab}{a(b+c)}$

8. $\frac{2a(b+c)}{c(a-b)(a+c)} \cdot \frac{a+c}{(a+b)(a+c)}$

9. $\frac{2(a+b)}{c} \cdot \frac{a+c}{2(a-b)}$

10. $\frac{3(a+b)}{c+d} \cdot \frac{ca}{3(a-b)}$

11. $\frac{3(a+b)}{2ac} \cdot \frac{a}{3(a+b)}$

12. $\frac{c(a+b)(a+c)}{a-c} \cdot \frac{1}{(c-a)(a-b)}$

13. $\frac{1}{a+b} \cdot \frac{3(a+b)}{a+c}$

14. $\frac{2a}{2ab^2 + 3ab} \cdot \frac{3a+2b}{2a}$