

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

6. $\frac{ab}{2} \cdot \frac{ba}{3a}$

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

8. $\frac{2a^2(b+c)}{3a-3(b+c)} \cdot \frac{a+b}{3a+3(b+c)}$

9. $\frac{2(a+b)}{3} \cdot \frac{a+b}{2(a-b)}$

10. $\frac{3(a+b)}{a+b} \cdot \frac{ab}{3(a-b)}$

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

12. $\frac{3(a+b)(a-b)}{a-b} \cdot \frac{1}{3(a-b)(a-b)}$

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

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