



Multiplying Rational Numbers

Rule 5: When multiplying numbers with the same sign, the answer is positive.

Rule 6: When multiplying or dividing numbers with different signs, the answer is negative.

Examples:

$$\begin{aligned} \text{Simplify } -4(-6) \\ = -24 \end{aligned}$$

$$\begin{aligned} \text{Simplify } \frac{-4}{5} \cdot \frac{3}{4} \\ \frac{\overset{-1}{\cancel{4}}}{5} \cdot \frac{3}{\underset{1}{\cancel{4}}} = \frac{-3}{5} \end{aligned}$$

$$\begin{aligned} \text{Simplify } -2.5(-0.7) \\ = +1.75 \end{aligned}$$

Simplify the following.

1. $(-5)(+9)$

2. $(-6)(+12)$

3. $(-5)(-8)$

4. $-10(+6.3)$

5. $(-1.5)(-6)$

6. $(1.1)(0.4)$

7. $\frac{2}{3}\left(\frac{-1}{7}\right)$

8. $\frac{-3}{11}\left(\frac{-2}{9}\right)$

9. $\frac{-3}{5}\left(\frac{7}{11}\right)$

10. $(-0.5)(+1.2)$

11. $(1.1)(-0.25)$

12. $(-7)(0.25)$

13. $\left(-\frac{10}{3}\right)\left(\frac{4}{5}\right)$

14. $\left(-2\frac{3}{4}\right)\left(-1\frac{1}{7}\right)$

15. $\left(-2\frac{1}{2}\right)\left(3\frac{3}{5}\right)$