

2.7N – Multiply and Divide Rational Expressions

A. Practice Simplifying

1. $\frac{14}{35}$

2. $\frac{12x^2}{14x^3}$

3. $\frac{5x^3y^2z}{15xy^2z^5}$

4. $\frac{3x^2 + 27x + 42}{18x^2 + 9x - 54}$

B. Practice multiplication

1. $\frac{3}{4} \cdot \frac{20}{9}$

2. $\frac{6}{14} \cdot \frac{7}{27}$

3. $\frac{9x}{25y^2} \cdot \frac{5y^5}{18x^3}$

4. $\frac{9v-81}{10v^2} \cdot \frac{10}{v^2-81}$

5. $\frac{n^2-12n+35}{n-5} \cdot \frac{n+4}{n-7}$

6. $\frac{5x+45}{7x-7} \cdot \frac{21x^2+14x-35}{15x+25}$

C. Practice Division

1. $\frac{5}{18} \div \frac{15}{9}$

2. $\frac{35x^2}{x+10} \div \frac{2x-10}{x^2+5x-50}$

3. $\frac{7x^2+35x+28}{x+1} \div \frac{x^2-16}{x^2+6x-7}$