

## Section P.5 WS

**Simplify each expression.**

1)  $\frac{6n}{8} \cdot \frac{4}{2}$

2)  $\frac{7}{9} \cdot \frac{8}{10m^2}$

3)  $\frac{9v^2}{4v} \div \frac{2}{2v^4}$

4)  $\frac{2}{7n^2} \div \frac{7}{5}$

5)  $\frac{x-3}{7x} \cdot \frac{x+3}{6x^3+18x^2}$

6)  $\frac{9}{b^2-12b+27} \div \frac{1}{b-9}$

7)  $\frac{1}{7x^2} \cdot \frac{7x^3+7x^2}{6x}$

8)  $\frac{p^2+3p-28}{p+2} \div \frac{p^2+3p-28}{p-1}$

9)  $\frac{3r^2+8r-16}{8-3r} \cdot \frac{3r-8}{3r-4}$

10)  $\frac{7n^2}{5n+3} \div \frac{1}{35n+21}$

11)  $\frac{7a-4}{-7a^2+39a-20} \div \frac{1}{a+1}$

12)  $\frac{1}{3n^2} \cdot \frac{2n^2-4n-70}{2n+10}$

13)  $\frac{25m+40}{42m^2+18m} \div \frac{20m^2+32m}{42m^2+18m}$

14)  $\frac{6b^2+12b-48}{2b+8} \cdot \frac{42b-24}{-21b^2+54b-24}$

## Section P.5 WS

Date \_\_\_\_\_ Period \_\_\_\_\_

Simplify each expression.

1)  $\frac{6n}{8} \cdot \frac{4}{2} \frac{3n}{2}$

2)  $\frac{7}{9} \cdot \frac{8}{10m^2} \frac{28}{45m^2}$

3)  $\frac{9v^2}{4v} \div \frac{2}{2v^4} \frac{9v^5}{4}$

4)  $\frac{2}{7n^2} \div \frac{7}{5} \frac{10}{49n^2}$

5)  $\frac{x-3}{7x} \cdot \frac{x+3}{6x^3+18x^2} \frac{x-3}{42x^3}$

6)  $\frac{9}{b^2-12b+27} \div \frac{1}{b-9} \frac{9}{b-3}$

7)  $\frac{1}{7x^2} \cdot \frac{7x^3+7x^2}{6x} \frac{x+1}{6x}$

8)  $\frac{p^2+3p-28}{p+2} \div \frac{p^2+3p-28}{p-1} \frac{p-1}{p+2}$

9)  $\frac{3r^2+8r-16}{8-3r} \cdot \frac{3r-8}{3r-4}$   
 $-r-4$

10)  $\frac{7n^2}{5n+3} \div \frac{1}{35n+21}$   
 $49n^2$

11)  $\frac{7a-4}{-7a^2+39a-20} \div \frac{1}{a+1} \frac{-a-1}{a-5}$

12)  $\frac{1}{3n^2} \cdot \frac{2n^2-4n-70}{2n+10} \frac{n-7}{3n^2}$

13)  $\frac{25m+40}{42m^2+18m} \div \frac{20m^2+32m}{42m^2+18m} \frac{5}{4m}$

14)  $\frac{6b^2+12b-48}{2b+8} \cdot \frac{42b-24}{-21b^2+54b-24}$   
 $-6$