

Chapter 8 Review

Write the letter for the correct answer in the blank at the right of each question.

1. For what value(s) of m is the expression $\frac{m^2 - 2m + 1}{2m^2 + m - 3}$ undefined?

A $-\frac{3}{2}, 0, 1$

B $-1, \frac{3}{2}$

C $-\frac{3}{2}, 1$

D $\frac{3}{2}$

1. _____

For Questions 2–6, simplify each expression.

2. $\frac{x^2 + 5x + 4}{x^2 + 2x + 1} \cdot \frac{2x + 2}{x + 4}$

F $\frac{1}{2}$

G 2

H $\frac{(x+4)^2}{2(x+1)^2}$

J $\frac{x+4}{2(x+1)}$

2. _____

3. $\frac{a+b}{3} \div \frac{a^2+b^2}{12}$

A $\frac{a+b}{4(a^2+b^2)}$

B $\frac{4}{a+b}$

C $\frac{4}{a+b}$

D $\frac{4(a+b)}{a^2+b^2}$

3. _____

4. $\frac{\frac{4c^2 - 36}{8c^2 - 24c}}{\frac{12c + 36}{2c^2 - 6c}}$

F $\frac{c-3}{12}$

G $12c - 36$

H $\frac{c+3}{c-3}$

J 3

4. _____

5. $\frac{6n}{n^2 - 9} - \frac{3}{n + 3}$

A $\frac{3}{n+3}$

B $\frac{3}{n-3}$

C $\frac{6n-3}{n^2-n+12}$

D $\frac{6n-3}{n^2-9}$

5. _____

6. $\frac{m}{m-5} - \frac{2}{5-m}$

F $\frac{2m}{m-5}$

G $\frac{m-2}{m-5}$

H $\frac{m+2}{m-5}$

J $\frac{2m}{(m-5)^2}$

6. _____

For Questions 7 and 8, find the LCM of each set of polynomials.

7. $5p - 20, 15p - 60$

A $75(p-4)$

B $15(p-4)$

C $p-4$

D $5(p-4)$

7. _____

8. $t^2 - 8t + 15, t^2 - t - 20$

F $(t+3)(t-5)(t+4)$

H $(t+3)(t-5)(t-4)$

G $(t-3)(t+5)(t-4)$

J $(t-3)(t-5)(t+4)$

8. _____

9. Solve $\frac{n}{n-4} + n = \frac{12-4n}{n-4}$.

F $-4, 3$

G $-3, 4$

H -4

J 3

9. _____