Name _____ Date _____

7.3 Puzzle Time

What Is Black And White And Red All Over?

Write the letter of each answer in the box containing the exercise number.

Simplify the expression, if possible.

1. $\dfrac{45}{10x - 15}$

2. $\dfrac{x - 7}{x^2 - 3x - 28}$

3. $\dfrac{2x}{3x^2 + 8}$

Find the product or quotient.

4. $\dfrac{y}{x^2 - 1} \bullet \dfrac{x - 1}{2y}$

5. $\dfrac{3x}{x + 1} \bullet \left(x^2 + 2x + 1\right)$

6. $\dfrac{(x + 3)}{(x + 2)} \div \dfrac{(x - 1)(x + 3)}{(x - 1)^2}$

7. $\dfrac{1}{x + 9} \div \dfrac{6 - x}{3x - 18}$

8. $\dfrac{10x^2yz^4}{5xy^3} \div 2x^5y^2z$

9. $\dfrac{x - 8}{x^2 - 2x - 48} \bullet \dfrac{4x^2 + 40x}{x + 10}$

10. $\dfrac{1}{5x^2} \div \dfrac{9x - 36}{5x^3 - 35x^2}$

Answers

E. $\dfrac{4x}{x + 6}, x \neq -10, x \neq 8$

S. $3x(x - 1), x \neq -1$

A. $\dfrac{9}{2x - 3}$

P. $\dfrac{z^3}{x^4y^4}, z \neq 0$

N. $\dfrac{1}{x + 4}, x \neq 7$

W. $\dfrac{1}{2(x + 1)}, x \neq 1, y \neq 0$

P. $\dfrac{x - 1}{x + 2}, x \neq -3, x \neq 1$

R. $\dfrac{x - 7}{9(x - 4)}, x \neq 0, x \neq 7$

E. $\dfrac{2x}{3x^2 + 8}$

A. $-\dfrac{3}{x + 9}, x \neq 6$

1		2	3	4	5	6	7	8	9	10