

Name: _____ Date: _____

[4] 1. State all non-permissible values for given expressions:

$\frac{2x + 1}{x^2 - 4}$	$\frac{5x}{3x^4}$
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[8] 2. Circle expressions that are rational:

$\frac{1059x}{x^{67}}$	$\frac{2^x}{x^5}$	$\sqrt{5}x^2$	$\frac{3}{5x + 1}$
$\frac{10^6}{b}$	$\frac{\pi x}{2}$	$\frac{2y^7 - 4y^3}{y}$	5

3. State restrictions on the variable for each given expression:

$\frac{x^2 - 7x + 12}{-x + 7}$	$\frac{x + 5}{9x^2 - 16}$
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[2] 4. Write two rational expressions equivalent to $\frac{3x+8}{x^2-2}$:

[8] 5. Simplify for all permissible values. Clearly identify your final answer.

$$\frac{x^2 - 36}{x^2 - 11x + 30}$$

$$\frac{x^2 + 19x + 48}{9x + 27}$$

$$\frac{121x^2 - 100}{10 - 11x}$$

$$\frac{5x^6}{75x^3}$$