

SCORE: ____ / 10 POINTS

INSTRUCTIONS:

Write your final answers in the spaces provided at the bottom of page 1.

On pages 2 and 3, show the solution used to get your answers.

You will get 1 point for each correct answer with a correct and neat solution.

You will get ½ point for each correct answer with a correct but messy solution.

You will get 0 points for each incorrect answer, or each correct answer with no solution or an incorrect solution.

This quiz is intended as practice for writing solutions for the midterm.

- [1] Joe's score on quizzes varies directly as the number of hours he studies and inversely as the number of hours he plays his Wii. On his last quiz, Joe studied for 2 hours and spent 5 hours on his Wii, and earned 40 points. For Monday's quiz, Joe has studied for 3 hours and spent 4 hours on his Wii. What should his score be for Monday's quiz? Write your answer in a complete sentence as shown in class.

[2] Solve for x : $\frac{x}{x-2} + \frac{2}{x-1} = \frac{2}{x-2}$.

[3] Simplify: $\frac{\frac{2}{x-2} - \frac{1}{x}}{1 - \frac{2}{x}}$.

[4] Subtract and simplify: $\frac{2}{x^2 - x} - \frac{4}{x^2 - 1}$.

[5] Add and simplify: $\frac{3x+1}{4x^2 - 1} + \frac{5x+3}{4x^2 - 1}$.

[6] Divide and simplify: $\frac{2x^2 + x - 3}{x^2 + 5x - 6} \div \frac{6x^2 + x - 12}{x^2 + 3x - 18}$.

[7] Multiply and simplify: $\frac{10 - 2x}{x^3 - 4x} \times \frac{x^4 + 5x^3 + 6x^2}{x^2 - 2x - 15}$.

- [8] Three divided by two more than a number equals one divided by that number minus four. Find the number.

[9] Solve for x : $5 + 2|3 + x| = 13$.

[10] Solve for x : $|4 - 3x| < 10$.

YOUR ANSWERS:

[1] _____

[2] _____ [3] _____ [4] _____ [5] _____

[6] _____ [7] _____ [8] _____ [9] _____

[10] _____

YOUR SOLUTIONS:

[1]

[2]

[3]

[4]

[5]

YOUR SOLUTIONS:

[6]

[7]

[8]

[9]

[10]

