

Math 156 PRECALCULUS
Fall 2015

Quiz 2 – Version One

Thursday, September 17, 2015

Name: _____

This quiz has 8 problems worth a total of 30 points. It is TWO SIDED.

1. (4 points) Perform the addition and simplify: $\frac{x}{x^2-4} + \frac{1}{x-2}$.

Answer: _____

2. (4 points) Simply the compound fractional expression: $\frac{\frac{y}{x} + y}{\frac{x+y}{x}}$.

Answer: _____

3. (4 points) Simplify the rational expression $\frac{x^2+4x+3}{x^2-2x-15}$.

Answer: _____

4. (4 points) Find all real solutions of the equation $3x^2 = 6x + 2$ by completing the square.

Answer: _____

5. (3 points) Find all real solutions to $|4x - 7| = 11$.

Answer: _____

6. (4 points) Find all real solutions to $4 - \sqrt{3x - 1} = 0$.

Answer: _____

7. (4 points) A student obtained scores of 100, 91 and 83 on the three midterm exams. If the final exam counts twice as much as a midterm, what score is needed on the final to get an average score of 90.

Answer: _____

8. (3 points) Simplify the expression $\left(\frac{x^4}{7}\right)^2 (4x^{-3})$.

Answer: _____