

Math 156 PRECALCULUS
Fall 2015

Quiz 2 – Version A

Thursday, September 17, 2015

Name: _____

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

1. (4 points) Simplify the rational expression $\frac{x^2+3x+2}{x^2-3x-10}$.

Answer: _____

2. (4 points) Perform the addition and simplify: $\frac{x}{x^2-9} + \frac{1}{x-3}$.

Answer: _____

3. (4 points) Simplify the compound fractional expression: $\frac{x + \frac{y}{x}}{\frac{x+y}{x}}$.

Answer: _____

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

Answer: _____

5. (3 points) Find all real solutions to $|3x - 5| = 13$.

Answer: _____

6. (4 points) Find all real solutions to $3 - \sqrt{8x - 1} = 0$.

Answer: _____

7. (4 points) A student obtained scores of 100, 91 and 85 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 $\left(\frac{x^4}{5}\right)^2 (4x^{-3})$.

Answer: _____