

Math-8H

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Semester 2 – Exam 3 – Practice

Apr. 9, 2018

_____, _____ of 130 points. _____
Last name (please print) First name (please print) Points Percent Letter

For questions 1 and 2, solve by the quadratic formula.

(10 pts) 1. $10x^2 - 10x - 2 = 0$

(10 pts) 2. $-5x^2 - 2x + 9 = 0$



For questions 3 to 12, solve by any method that is convenient.

(10 pts) 3. Solve. $x^2 + x - 2 = 0$

(10 pts) 4. Solve. $x^2 + x - 1 = 0$

(10 pts) 5. $x^2 - 5x - 14 = 0$

(10 pts) 6. $(2x - 7)(3x + 13) = 0$

(10 pts) 7. $x^2 - 49 = 0$

(10 pts) 8. $x^2 + 6x = -5$

(10 pts) 9. $7x = -2x^2 - 3$

(10 pts) 10. $x^2 + 2x - 35 = 0$



(10 pts) 11. $x^4 - 81 = 0$

(10 pts) 12. $(x + 7)^2 + 7(x + 7) + 12 = 0$

(10 pts) 13. Simplify $\frac{5}{x^2 + 3x - 10} - \frac{x - 7}{x^2 - 4}$



Answers

1. $x = \frac{5-3\sqrt{5}}{10}, x = \frac{5+3\sqrt{5}}{10}$

2. $x = \frac{-1-\sqrt{46}}{5}, x = \frac{-1+\sqrt{46}}{5}$

3. $x = -2, x = 1$

4. $x = \frac{-1-\sqrt{5}}{2}, x = \frac{-1+\sqrt{5}}{2}$

5. $x = -2, x = 7$

6. $x = -\frac{13}{3}, x = \frac{7}{2}$

7. $x = -7, x = 7$

8. $x = -5, x = -1$

9. $x = -3, x = -\frac{1}{2}$

10. $x = -7, x = 5$

11. $x = -3, x = 3$

12. $x = -11, x = -10$

13. $\frac{x^2 - 7x - 45}{(2-x)(x+2)(x+5)}$