

Name:

Date:

Period:

Show all your work on a separate sheet of paper.

1. The solution set of the equation $x^2 - 4x = 0$ is:	13. The solution set of the $x^2 - 5x + 6 = 0$ is:
2. What is the solution set of the equation $x^2 + 3x - 10 = 0$?	14. What is the solution set of the equation $x^2 = 49$?
3. What is the smaller root of $(x + 4)(x - 3) = 0$?	15. Find the negative solution of $2x^2 + 5x - 3 = 0$.
4. What is the positive root of $3x^2 = 27$?	16. Solve for the positive value of x : $\frac{1}{x-1} = \frac{x-1}{4}, x \neq 1$
5. Find the positive value of x : $\frac{2x+5}{7} = \frac{1}{x}, x \neq 0$	17. Find the positive root of x : $\frac{x+3}{3x} = \frac{x}{12}, x \neq 0$
6. What is an equation of the axis of symmetry of the graph whose equation is $y = x^2 - 4x - 6$?	18. What is an equation of the axis of symmetry of the graph whose equation is $y = x^2 + 6x + 7$?
7. The solution set of the equation $x^2 - x - 6 = 0$ is:	19. The solution set of the $x^2 - 5x - 6 = 0$ is:
8. The solution set of the equation $x^2 - 3x - 4 = 0$ is:	20. The solution set of the equation $x^2 - 2x - 3 = 0$ is:
9. The smallest member of the solution set of $(x - 3)(x + 2) = 0$ is:	21. Find the solution of $4x^2 = 64$.
10. What is the positive root of $3x^2 + 5x = 8$?	22. Solve for x : $\frac{x-4}{5} = \frac{1}{x}, x \neq 0$
11. Find the positive value of y : $\frac{3+y}{2y} = \frac{y-1}{y}, y \neq 0$	23. Find the positive root of x : $\frac{1}{x-1} = \frac{x+2}{4}, x \neq 1$
12. What is an equation of the axis of symmetry of the graph whose equation is $y = x^2 + 8x - 10$?	24. What is an equation of the axis of symmetry of the graph whose equation is $y = 2x^2 - 3x - 1$?

Part II Graphing Questions

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| 1. (a) On graph paper, graph $y = x^2 - 4x + 9$ for the interval $-1 \leq x \leq 5$.
(b) On the same set of axes, graph $y - x = 5$.
(c) What is the solution to the system of equations? | 2. (a) On graph paper, graph $y = -x^2 + 4x - 3$ for the interval $-1 \leq x \leq 5$.
(b) On the same set of axes, graph $y + 1 = x$.
(c) What is the solution to the system of equations? |
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