MATH 0100 Solutions for the Final Exam Review

1a. 5

1b. 4

1c. $5\frac{3}{8}$ or $\frac{43}{8}$

1d. $6\frac{7}{24}$ or $\frac{151}{24}$

1e. 98

1f. $\frac{1}{12}$

1g. $-\frac{5}{4}$ or $-1\frac{1}{4}$

1h. $\frac{-47}{55}$

1i. $\frac{1}{12}$

1j. 0.04873

2a. hundredths

2b. 9

2c. thousandths

2d. 629.0

3. 38,006.014

4a. −7

4b. three

5. 6.21

6a. true

6b. false, it's undefined

6c. true

6d. true

7. 6x

8. $\frac{7}{10}$

9. 0.084

10. 230%

11. $\frac{2}{5}$

12. <

13. $\frac{13}{40}$

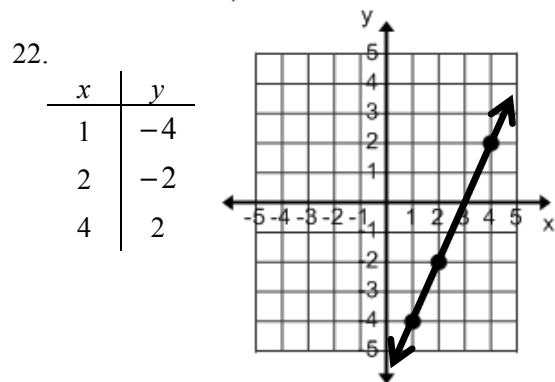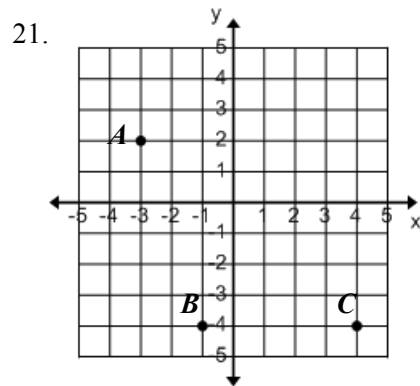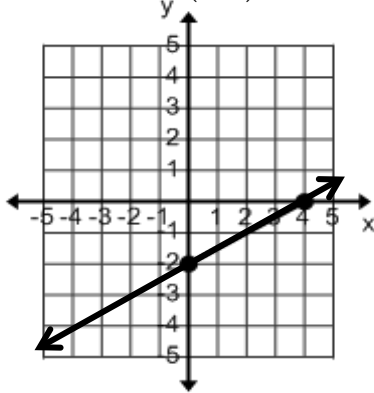14. $31\frac{1}{6}$

15. $\frac{61}{8}$

16. 6

17. 36

18. $\frac{3}{20}, \frac{1}{4}, \frac{2}{5}$

19. $2 \cdot 2 \cdot 3 \cdot 5 \cdot 7$

20. 19, 23, 29

21.

22.

x	y
1	−4
2	−2
4	2

23. x-intercept $(4,0)$, y-intercept $(0,-2)$

24. $x=-3$ $y=1$
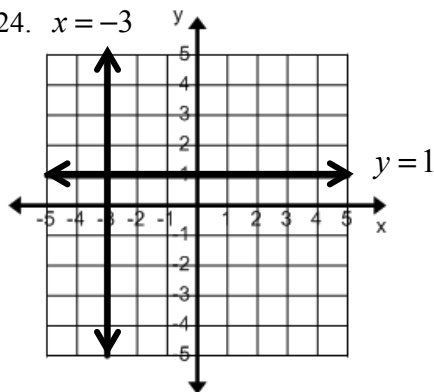
25.

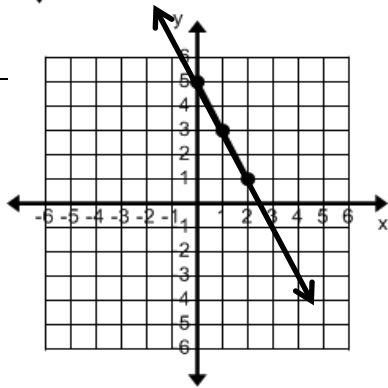| x	y
0	5
1	3
2	1

26. 51

27. $9\dfrac{3}{4}$ feet long

28. 58% wanted a fill-up

29. $177,000

30. 18 students eat the school lunch

31. 2,100 miles

32. 180 defective batteries

33. $549,150

34. 35 feet

35. $852

36. 26 points were gained

37. 0.436 lb.

38. $10,920 in interest, $88,920 total amount

39a. 110.25 square feet
39b. 42 feet

40. 810 cubic inches

41. $2x+(3x+4)+(4x+6)$ simplifies to $9x+10$

42. exact is 10π m and approximate is 31.4 m

43. 2.97 square meters

44. exact is 9π square feet and approximate is 28.26 square feet

45. 4 yards

46. 13,200 feet

47. 288 square inches

48. 4 tons

49. 14,400 minutes

50. 96 pints

51. $6x^3+x^2+10x$

52. $5a-2$

53. $2x^2-3x+7$

54. $4n-5$

55. $-8+3x$ or $3x-8$

56. 18

57a. true
57b. false
57c. false
57d. true
57e. true
57f. false
57g. false
57h. true

58. 5x

59. 6

60. 9 first class seats

61. 3

62. she redeemed five 30-cents-off coupons

63. there are 1,200 total number of pages in the telephone book

64a. 16
64b. -16
64c. 16
64d. 125
64e. -125
64f. -125
64g. -20

65a. $\dfrac{5}{12}$
65b. 0
65c. -29
65d. 7

66. -14

67. 5 and 6

68. 12

69. $\dfrac{2}{5}$

70a. $r = 64$
70b. $n = -11$
70c. $x = -51$
70d. $x = \dfrac{3}{11}$
70e. $a = 1$
70f. $x = -11$
70g. $n = 0$
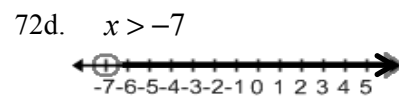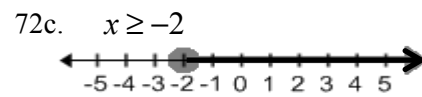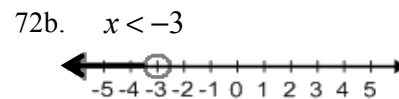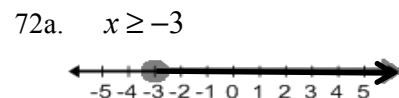70h. $x = -0.5$
70i. $x = \dfrac{11}{28}$
70j. $y = -2$
70k. $x = -\dfrac{1}{2}$ (reduced fraction)
70l. $z = 9$
70m. $y = \dfrac{3}{8}$
70n. $x = 5$

71a.

71b.

71c.

72a. $x \geq -3$

72b. $x < -3$

72c. $x \geq -2$

72d. $x > -7$
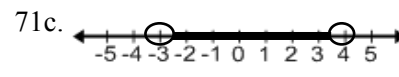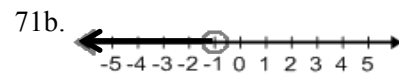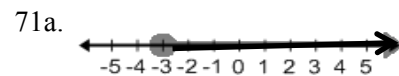
73. e
74. true

75. Here are some ideas of things to do when studying for the final exam.
- Listen very carefully to your instructor with regards to preparing for and taking the final exam and do what your instructor suggests.
- Start early in studying for the final exam; do not wait until the last minute.
- Review all of the material for the final exam from your textbook, notebook, and any handouts from your instructor. Review previous tests, quizzes, and homework assignments.
- Check to see if your instructor or mathematics department will be conducting a review for the final exam.
- Check with your instructor to see whether they have a practice final exam or final exams from previous semesters that may be available to students for review.
- Use your previously taken exams as a practice final exam.
- Review concepts and definitions by reading the Chapter Highlights at the end of each chapter.
- Review any formulas that you may need to memorize.
- Practice working out exercises by completing the Chapter Review found at the end of each chapter and/or the latest Cumulative Review.
- It is important that you place yourself in conditions similar to test conditions to find out how you will perform. After you feel you know the material, take a sample final exam and do not use your notes or your textbook. Then check your sample exam and if you are not satisfied with the results, study the areas that you are weak in and try again.
- If you are unsure of some concepts, see your instructor or visit a learning lab for assistance. View the video segment of any troublesome sections.
- If you need further exercises to work, try the Cumulative Reviews at the end of the chapters.
- On the day of the final exam, allow yourself plenty of time to arrive at where you will be taking it.

76. e