Study Guide for First Semester Exam
2017-2018

Add, subtract, multiply or divide the following decimals. Use the margins of the paper to show your scratch work. Write your final answer on the line beside each problem.

1. 6.035 + 3.4 + 5 + 0.057 = _____
2. 71 - 5.3 = _____
3. 6.04 x 5.9 = _____
4. 4.608 ÷ 1.2 = _____
5. 58.3 - 12.923 = _____

Add, subtract, multiply or divide the following fractions. Use the space below each problem to show your work. Circle your final answer.

6. $\frac{8}{9} - \frac{2}{5} =$
7. $\frac{3}{4} + \frac{4}{5} =$
8. $5\frac{7}{8} + \frac{11}{4} =$
9. $4\frac{2}{7} - 2\frac{1}{5} =$
10. $\frac{4}{9} \; x \; \frac{2}{3} =$
11. $\frac{3}{4} \; x \; 11 =$

12. $4\frac{4}{5} \times 3\frac{2}{3} =$

13. $2\frac{3}{4} \times 3\frac{1}{10} =$

14. $\frac{6}{7} \div \frac{8}{9} =$

15. $\frac{2}{5} \div \frac{4}{7} =$

16. $5 \div \frac{4}{9} =$

17. $4\frac{1}{2} \div 2\frac{3}{8} =$

18. A package of nuts contains $14\frac{3}{8}$ cups of nuts. Each serving is $1\frac{1}{4}$ cups. How many servings does the package contain?

19. A malt shop had 4 boxes of waffle cones. They use $\frac{1}{7}$ of a box each day. How many days will it take them to use all four boxes?

20. A chef had 7 potatoes. How many bowls of mashed potatoes could he make if each bowl used $\frac{1}{4}$ of a potato?

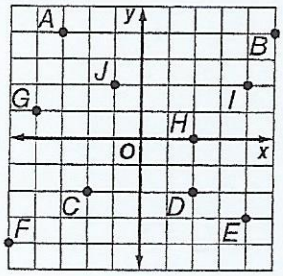
21. What is the Least Common Multiple (LCM) of 8 and 12?

22. What is the Least Common Multiple (LCM) of 6, 10, and 15?

23. What is the Greatest Common Factor (GCF) of 45 and 60?

24. What is the Greatest Common Factor (GCF) of 28, 32, and 36?

Use the coordinate plane at the right. Write the ordered pair that names each point.



25. C

26. E

27. G

28. I

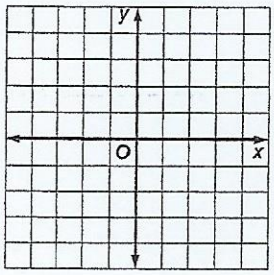
29. D

30. F

31. H

32. J

Graph and label each point using the coordinate plane at the right.



33. $R(-2, 3)$

34. $Z(-1, 0)$

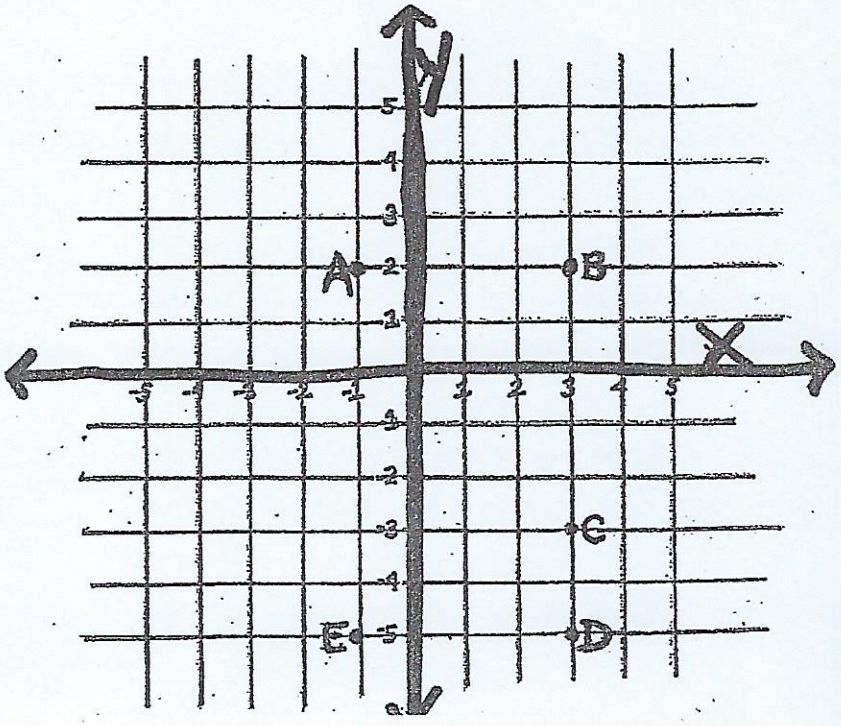
35. $S(4, 1)$

36. $P(3, -2)$

37. $B(-3, -4)$

38. $M(1, -3)$

Label the quadrants in the coordinate plane to the right



39. What quadrant is point D located in?

40. Point B is located in which quadrant?

41. An ordered pair in Quadrant III would have what integer signs for the x and y?

42. An ordered pair in Quadrant I would have what integer signs for the x and y?

Write an integer for each situation.

43. a 15-yard gain in a football game
44. ten miles below sea level
45. 24° below zero
46. a loss of 17 pounds

Put these integers in order from LEAST to GREATEST.

47. -82, -71, -67, -51
48. -785, -799, -120, -881
49. -6, 1, 4, 8
50. -68, 69, 51, -54

Find the value:

51. $\lvert -7 \rvert - \lvert 3 \rvert$ = ☐	53. $\lvert 12 \rvert + \lvert 8 \rvert$ = ☐	55. $\lvert 13 \rvert - \lvert -7 \rvert$ = ☐
52. $\lvert -14 \rvert + \lvert -4 \rvert$ = ☐	54. $\lvert -9 \rvert + \lvert 7 \rvert$ = ☐	56. $\lvert 6 \rvert - \lvert 1 \rvert$ = ☐

Use Order of Operations to solve for an answer.

57) $5+(9+6^3-3)-3$

58) $10+(6\times5)+9^3\times8$

59) $3+(5+6+9)+7$

60) $2+4^3\times4+(2\times9)$

61) $(5+36\div4)+4\div2$

62) $2+(5\times4)-7+2$

Evaluate each expression using the values given for each variable.

63) $(y + z) - 7$ when $y = 5, z = 8$

64) $k - 29$ when $k = 42$

65) $(p - q) + (52 - 34)$ when $p = 62, q = 48$

66) $(x - z) + (13 - 4)$ when $x = 12, z = 8$

67) $(h + 19) - (11 - h)$ when $h = 7$