End of 7th Grade with Ms. Tsai and Mrs. Caproni

Entering 8th Grade

Summer Assignment 2023

Due Date: September 7, 2023

Objective: Students will practice and expand upon previously learned skills in preparation for more rigorous Math 8 Content.

Overview of Instructions: Complete each problem in the space provided. You must show work for each problem when applicable to receive credit for this assignment. If necessary, you may work on a separate sheet of paper, but this paper must be turned in with your assignment. We realize you cannot show work for processes such as rounding, but you should show work for all operations whenever possible. Once you have completed a problem, circle your final answer and record it in the answer line. You must show work on a separate sheet of paper to receive full credit.

When you return in September, you are expected to hand in your completed Summer Math Packet by Thursday, September 7. On Tuesday, September 12, you will be given a quiz covering the topics from the Summer Math Packet.

Grading: Summer Math Packet – Due Thursday, September 7, 2023

Summer Math Packet Quiz - Tuesday, September 12, 2023

Additional Resources: The material reviews the 7th-grade topics; the topics will not be re-taught in 8th grade. If you have difficulty with anything in the assignment, try searching the following sites for tutorials/videos/examples of problems: bigideasmath.com, khanacademy.com, coolmath.com, purplemath.com, mathwarehouse.com, etc. You can also Google it, of course! We encourage you to form study groups to work collaboratively with peers to complete the assignment successfully.

Please do not call the office for a copy of the summer assignment, as they will not have one. The packet has been posted to the Summer Math Assignments 2023 Google Classroom.

Good Luck! See you in September!

Tell whether the two fractions form a proportion. Show your work to justify your answer.

1. $\dfrac{3}{4}, \dfrac{16}{20}$ 2. $\dfrac{5}{7}, \dfrac{30}{42}$ 3. $\dfrac{4}{18}, \dfrac{6}{27}$

1. _____

2. _____

4. Use mental math to solve the equation. $4 + c = 0$

3. _____

4. _____

Order the numbers from least to greatest.

5. _____

5. $\left|-5\right|, 6, -6, -\left|4\right|, -2$ 6. $\dfrac{15}{2}, -8.5, -\dfrac{42}{5}, 10.2$

6. _____

Solve the inequality.

7. _____

7. $4x < 24$ 8. $x + 8 \geq 12$

8. _____

9. What is the volume of the prism?

9. _____

5 cm

3 cm

4 cm

10. _____

11. _____
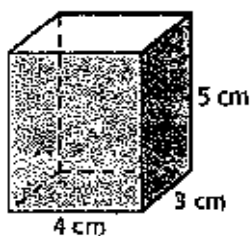
10. Solve the proportion $\dfrac{7}{5} = \dfrac{21}{x}$.

12. _____

13. _____

Simplify the expression.

14. _____

15. _____

11. $-4 + 11$ 12. $7 + 15 + (-7)$ 13. $-12 + (-5) + (-10)$

16. _____

14. $60 + (-4)$ 15. $\left|-34\right|$ 16. $\left|-(-41)\right|$

17. _____

18. _____

17. $17(-14)$ 18. $12 - (-19)$ 19. $\dfrac{4}{15} + \dfrac{5}{9}$

19. _____

20. _____

20. $-\dfrac{7}{8} \div \dfrac{3}{4}$ 21. $\dfrac{13}{18} \cdot \dfrac{9}{25}$ 22. $-\dfrac{7}{12} - \dfrac{1}{8}$

21. _____

23. $(0.6)^2$ 24. $8.37(-5.3)$ 25. $0.95 - 3.49$

22. _____

23. _____

24. _____

25. _____

Solve the equation.

26. $13.6 + x = 27$ **27.** $7 + x = -2$ **28.** $8 - x = 13$

29. $x - 11 = -5$ **30.** $3x - 2 = -5$ **31.** $8x + 5 = 21$

32. $9 - 2x = 23$

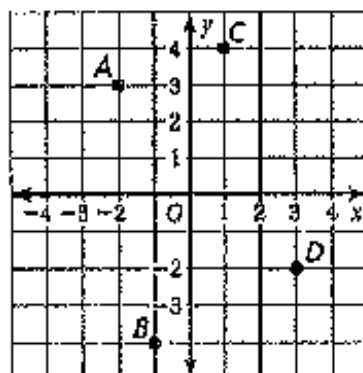**33.** You are scuba diving at -8 feet. You dive 5 feet deeper. What is your position in the water?

Find the coordinates of the point.

34. A **35.** B

36. C **37.** D

38-40. Solve.

38. $-6 - (-14)$ **39.** $9 - (-4) + 1$ **40.** $8 + 13 - (-5)$

Write the fraction as a decimal.

41. $\dfrac{3}{4}$ **42.** $\dfrac{5}{16}$ **43.** $\dfrac{21}{4}$

Evaluate the expression when $x = -\dfrac{1}{5}$ **and** $y = \dfrac{3}{4}$.

44. $x + (-y)$ **45.** $4x + y$

Answers

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

46. _____

Write the percent as a decimal.

46. 81%   47. 210%   48. 5%   49. 0.04%

50. 100.8%   51. 60%   52. 23.7%   53. 16.75%

Write the decimal as a percent.

54. 0.66   55. 0.312   56. 0.51   57. 0.97

58. 1.5   59. 0.04   60. 0.312   61. 2.206

Write and solve a proportion to answer the question.

62. 40% of what number is 15?   63. 24 is 0.6% of what number?

64. What percent of 75 is 27?   65. 17 is what percent of 68?

Answers

46. _____
47. _____
48. _____
49. _____
50. _____
51. _____
52. _____
53. _____
54. _____
55. _____
56. _____
57. _____
58. _____
59. _____
60. _____
61. _____
62. _____
63. _____
64. _____
65. _____