

Name:	Date:
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Math Incoming 8th Grade Summer Break Packet June 17- August 19, 2019

Expectations

- This is for you to stay on top of your work over the break!
- Do not write on this page!



Suggested Date	Math Problems Pacing Guide	Rubric
Week 1 June 17-21	1. Long Division #1 - 3	1 0.5 0
	2. Operations with Fractions #4 - 6	1 0.5 0
Week 2 June 24-28	3. Miscellaneous #7 - 10	1 0.5 0
	4. Equations #11 - 16	1 0.5 0
Week 3 June 1-5	5. Expressions & Reasoning #17 - 19 Areas #20 -21	1 0.5 0
	6. Circumference #22 Decimals to Percents (Vice Versa) #23 - 29	1 0.5 0
Week 4 July 8-12	7. Comparing Percents and Decimals #30 - 32	1 0.5 0
	8. Mean, Medium, & Mode #33 - 35	1 0.5 0
Week 5 July 15-19	9. Proportions & Rates 36 - 39	1 0.5 0
	10. Comparing negatives with Absolute Values #40 - 41	1 0.5 0
Week 6 July 22-26	11. Inequalities #42 - 43 Volume #44 WP #45	1 0.5 0
	12. Order of Operations #46 - 60	1 0.5 0
Week 7 July 29- August 2	13. Magnification of Rectangle #61	1 0.5 0
	14. Equations #62 - 67	1 0.5 0
Week 8 August 5- August 9	15. Coordinate points #68 - 71	1 0.5 0
	16. Probability #72 - 73	1 0.5 0
Week 9 August 12 - 16	Take this time to complete any work in this packet that is not yet complete	Total Habits Score: _____/16
	Summer Jam for NEW to Alpha students begins on: August 12, 2019 Summer Jam for RETURNING students begins on: August 14, 2019 Regular School Begins for Everyone on: August 19, 2019 - Packet DUE	

Welcome to Ms. Amarillas' class! I am so excited to meet all of you! I look forward to reinforcing all of the skills you have already learned with Mr. Min, Mr. Carpintero, and Ms. Garcia and teaching you new skills needed for your success in high school. I have heard about and witnessed many amazing qualities in and out of your classrooms and I want you to know that I will accept nothing but your absolute best - beginning with your work on this packet.

For each question:

- Use ONLY pencil (working in anything other than a pencil will result in a redo required)
- Show ALL your work (calculations/annotations) in the space provided
- **DO NOT USE A CALCULATOR**
- Do your absolute best on difficult questions
 - If you are struggling write down what part of the question is confusing you?
 - Example: I do not recall how to find a common denominator but I think this is how.... (then try the question).

Warning:

- Students that do not complete 100% this packet will be making it up after school or in place of fun week one 8th grade activities.
- If you have questions or concerns please call me after July 30th at (909) 635-7370 to set up an appointment for one-to-one support on school grounds or over the phone based on our combined availability.



1. $4.5 \div 0.9$

2. $34.1 \div 5.5$

3. $2.7(7.8)$

4. $\frac{6}{7} \cdot \frac{5}{9}$

5. $\frac{4}{5} \div \frac{8}{11}$

6. $\frac{3}{8} \cdot \frac{4}{9}$

7. You need to buy 5 notebooks for your classes at school. Each notebook costs \$2.79. What is the total cost of 5 notebooks before tax?

Complete the statement using <, >, or = .

8.

$$\frac{4 \text{ tables}}{3 \text{ groups}} \text{ — } \frac{6 \text{ tables}}{5 \text{ groups}}$$

9.

$$\frac{66 \text{ pages}}{2 \text{ hours}} \text{ — } \frac{99 \text{ pages}}{3 \text{ hours}}$$

10. You have \$50 in your savings account. Each week you deposit \$5 in your account. Write an expression that models the situation

Solve the equation.

11. $x + 5 = 10$

12. $x - 2 = 6$

13. $x - 1 = 9$

14. $7 + x = 13$

15. $5x = 65$

16. $\frac{x}{3} = 11$

Tell whether the two expressions are equivalent.

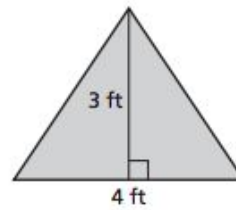
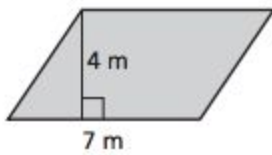
17. $5 + 3b$; $3b + 5$

18. $5(h + 7)$; $5h + 35$

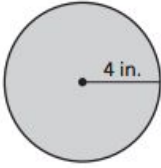
19. $(2 - c)4$; $2 - 4c$

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Find the area of the figures.
20. & 21.



22. What is the circumference of the circle? Use 3.14 for π .



Write the decimal as a percent or write the percent as a decimal.

23. 0.89

24. 2.37

25. 0.0029

26. 3%

27. 78%

28. 500%

29. In a survey, $\frac{17}{25}$ of the people surveyed have a cat. What percent of the people surveyed have a cat?

Order the numbers from least to greatest.

30. $\frac{5}{8}$, 60%, 0.64

31. 34%, $\frac{4}{15}$, 0.3

32. 0.57, 5.8%, $\frac{14}{25}$

Find the **mean**, **median**, **mode(s)**, and range of the data set.

33. 5, 9, 12, 3, 4, 5, 7, 14, 13

34. 1, 7, 2, 3, 9, 4, 6, 10

Mean:

Median:

Mode:

35. The following data are the numbers of customers at a coffee shop over a 10-day period.

135, 124, 140, 122, 409, 132, 119, 128, 136, 125

Which measure of center best represents the daily average number of customers at the coffee shop? Explain your reasoning.

Tell whether the two fractions form a proportion.

Hint: When you cross multiply, are the two sides of the equal sign equivalent?

36. $\frac{3}{4}$, $\frac{16}{20}$

37. $\frac{5}{7}$, $\frac{30}{42}$

38. $\frac{4}{18}$, $\frac{6}{27}$

39. Use the ratio table to find the unit rate in dollars per ounce.

Amount (ounces)	12	16	20	24
Cost (dollars)	0.96	1.28	1.6	1.92

Order the numbers from least to greatest.

40. -5 , 6 , -6 , -14 , -2

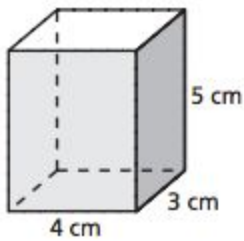
41. $\frac{15}{2}$, -8.5 , $-\frac{42}{5}$, 10.2

Solve the inequality.

42. $4x < 24$

43. $x + 8 \geq 12$

44. What is the volume of the prism?



45. A map has a scale of 1 in. : 10 mi. On the map, the distance between two cities is 5 inches. What is the actual distance between the cities?

46. $-4 + 11$

47. $-6 - 9$

48. $-7(-8)$

49. $60 \div (-4)$

50. $| -34 |$

51. $| -(-41) |$

52. $17(-14)$

53. $12 - (-19)$

54. $\frac{4}{15} + \frac{5}{9}$

55. $-\frac{7}{8} \div \frac{3}{4}$

56. $\frac{13}{18} \cdot \frac{9}{25}$

57. $-\frac{7}{12} - \frac{1}{8}$

58. $(0.6)^2$

59. $8.37(-5.3)$

60. $0.95 - 3.49$

61. The length and the width of a rectangle are both doubled. What is the ratio of the area of the larger rectangle to the area of the smaller rectangle?

Solve the equation.

62. $7 + x = -2$

63. $8 - x = 13$

64. $x - 11 = -5$

65. $3x - 2 = -5$

66. $8x + 5 = 21$

67. $9 - 2x = 23$

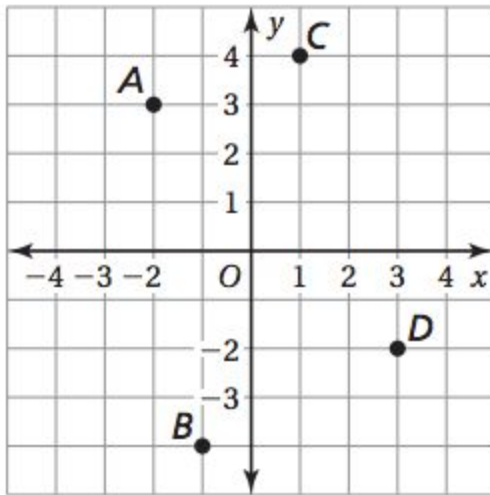
Find the coordinates of the point.

68. A

69. B

70. C

71. D



72. In a class, the teacher asks each person wearing red to name his or her favorite color. Is this sample representative of the entire class? Explain.

73. Each of the letters in the word MATHEMATICS are written on separate index cards. The cards are then placed in a hat. What is the probability of randomly drawing an index card with a vowel on it from the hat?