2024

Summer Math Packet

Entering

Grade 6

This packet encompasses the skills you learned in 5th grade and will help ensure you are prepared to enter 6th grade in September. Make sure to read the directions for each question carefully. You **MUST** show all your work for your effort grade. If you do your work on another sheet of paper, make sure to attach that to the end of the packet when you hand it to your teacher in September.

You will receive ***two grades*** for the math packet for the new school year so make sure to do your best! One grade is based on effort and the other is accuracy. Effort is showing your work and it is completed. Accuracy is the amount correct.

Due Date: Monday, September 9th, 2024

Good luck and have a wonderful summer!

The Math Department

Name _____

Grade **5**
Progress Monitoring
Assessment Form C

1. Mark all equations that are true.

- ☐ $340 \div 20 = 17$
- ☐ $840 \div 70 = 12$
- ☐ $750 \div 50 = 12$
- ☐ $880 \div 80 = 11$

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2. Consider the expression $19 - 3 \times 6 + 2$.

a. Use order of operations to solve the expression.

b. Insert parentheses in the expression so that it equals 128.

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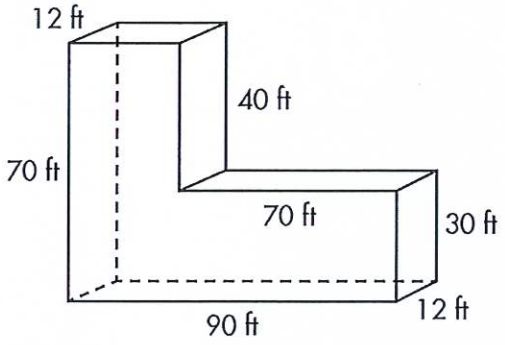
3. A building has the dimensions shown. Find the total volume of the building.



A 324 cubic feet

B 42,000 cubic feet

C 48,800 cubic feet

D 65,600 cubic feet

4. Which expressions have products less than $2\frac{3}{8}$? Select all that apply.

- ☐ $2\frac{3}{8} \times 1\frac{1}{3}$
- ☐ $\frac{1}{3} \times 2\frac{3}{8}$
- ☐ $2\frac{3}{8} \times 1\frac{1}{2}$
- ☐ $\frac{9}{10} \times 2\frac{3}{8}$

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5. Which of the following is NOT true?

A A rectangle is also a parallelogram.

B A square is also a rhombus.

C A parallelogram is also a quadrilateral.

D A rhombus has only one set of parallel sides.

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6. A 170-ounce bag of hamster food contains 86 equal-sized portions. How big will each portion be? Divide compatible numbers to solve.

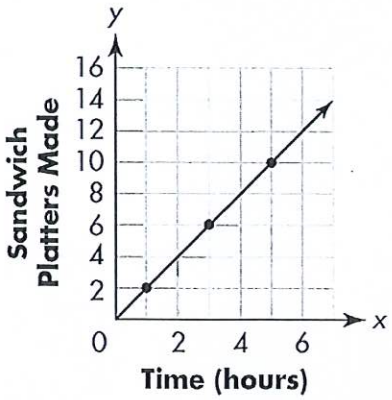
A Between 0 and 1 ounces

B Between 1 and 2 ounces

C Between 2 and 3 ounces

D Between 3 and 4 ounces

7. Grayson works at a deli making sandwich platters. The graph shows how many sandwich platters Grayson made one Saturday.



Part A

How many sandwich platters did Grayson make after 1 hour?

A $\frac{1}{2}$ **C** 1

B 2 **D** 4

Part B

What does the point (5, 10) represent on the graph?

A Grayson made 10 sandwich platters and each platter took 5 hours.

B Grayson made 5 sandwich platters and each platter took 10 hours.

C Grayson made 10 sandwich platters in 5 hours.

D Grayson made 5 sandwich platters in 10 hours.

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8. Find the product.

a. 148 × 0.01 = _____

b. 148 × 0.001 = _____

c. 1.48 × 103 = _____

d. 1.48 × 102 = _____

9. A number in expanded form is shown. What is the number in decimal form?

$$(6\times100)+(8\times1)+\left(7\times\frac{1}{10}\right)+\left(3\times\frac{1}{1000}\right)$$

A 6.873 **C** 608.703

B 68.73 **D** 680.73

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10. Which expression could represent the following phrase?

Subtract 7 from 15, then double it.

A $15-(2\times7)$

B $(15-7)\times2$

C $(15\times2)-7$

D $(2\times7)-15$

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11. Jasmin built a new bench for her doll house. The top is a rectangular piece of wood that is 6.75 centimeters long and 2.68 centimeters wide.

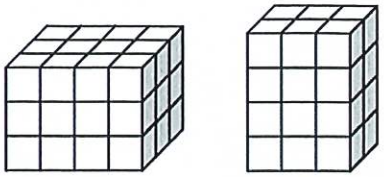
Part A

Round the length and width to the nearest whole number.

Part B

Round the length and width to the nearest tenth.

12. Both of the models are made up of 1-inch cubes. Which statement about these models is true?



Model A Model B

= 1 cubic in.

A Model A has a greater volume than Model B.

B Model A and Model B have the same volume.

C The volume of Model B is 1 cubic inch less than the volume of Model A.

D The volume of Model A and Model B combined is 64 cubic inches.

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13. Leo has $\frac{1}{4}$ of a box of cocoa. He can make 2 batches of no-bake cookies from the cocoa left in the box. How could Leo find how much cocoa will be in each batch?

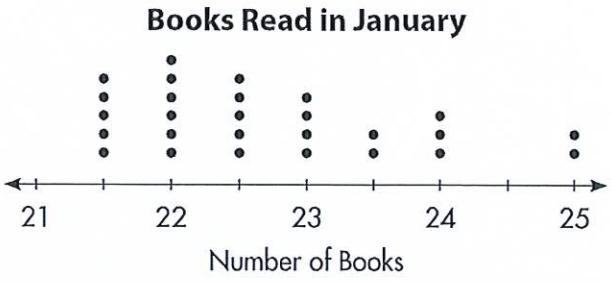
A $\frac{1}{4} \times 2 = \frac{1}{8}$ box of cocoa

B $\frac{1}{4} \div 2 = \frac{1}{8}$ box of cocoa

C $\frac{1}{4} \div 2 = \frac{1}{2}$ box of cocoa

D $\frac{1}{4} \times 2 = \frac{1}{2}$ box of cocoa

14. Use the information shown in the line plot. Jenna read the most books. Steve read the fewest. How many more books did Jenna read than Steve?



A $2\frac{1}{2}$

B 3

C $3\frac{1}{2}$

D 4

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15. Write >, < or = in the circle to make the statement true.

$(9 \times 10) + (6 \times 1) + \left(4 \times \frac{1}{1{,}000}\right)$ ◯

$(9 \times 10) + (6 \times 1) + \left(2 \times \frac{1}{100}\right)$

16. Joel writes a bird-watching blog. Each week he gets 9 new email subscribers and sells 4 e-books.

Part A

Complete the table to show how many new email subscribers and e-books Joel sells after each week. Use the rules "add 9" and "add 4".

Weeks	New Email Subscribers	e-books Sold
1	9	4
2		
3		
4		
5		

Part B

If the pattern continues, what ordered pair would represent the number of new email subscribers and number of e-books sold at week 6?

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17. Tara has 19 feet of yarn. She is making friendship bracelets that each need $\frac{1}{2}$ of a foot of yarn. How many bracelets can Tara make?

A $9\frac{1}{2}$

B 10

C $18\frac{1}{2}$

D 38

18. What is 8,416 ÷ 4?

19. Which expression can be used to determine the difference of 43 – 11.91?

A. 43 – 11 + 0.09

B. 43 – 11 – 0.09

C. 43 – 12 + 0.09

D. 43 – 12 – 0.09

20. Zoey parks her car at the brginning of a trail.

- She jogs 4 ½ miles along the trail before turning around.
- She jogs $3\frac{5}{8}$ miles back toward her car along the same trail.
- She then walks the remaining distance to her car.

What distance, in miles, does Zoey walk?

21. Frances builds a brick wall. Each row of bricks has a height of $2\frac{13}{16}$ inches. The wall has 12 rows of bricks. What is the height, in inches, of the wall Frances builds?

A. 19 ½

B. 21 ¾

C. $24\frac{13}{16}$

D. 33 ¾

22. The width of a parking lot is 24 yards. What is the width, in feet, of the parking lot?

A. 6

B. 8

C. 72

D. 96

23. Circle the information about the rhombi that is true?

All rhombi are *(rectangles, squares, parallelograms)* **that have** *(4 sides of equal length, 4 angles of equal measure).*

24. Cooper brought three 1-liter bottles of water to baseball practice. How many 100-milliliter servings of water did Cooper bring?

A 10

B 30

C 100

D 300

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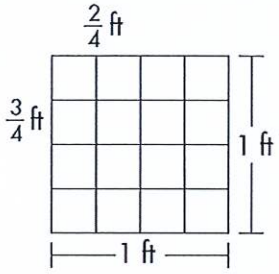
25. Find the area of a rectangle with side lengths $\frac{3}{4}$ ft and $\frac{2}{4}$ ft. Use the drawing to show your work. Then write your answer in the box.



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26. One bag of snack mix contains 1,346 calories. Each bag of snack mix contains 14 servings. Which shows a way to use compatible numbers to estimate the number of calories per serving?

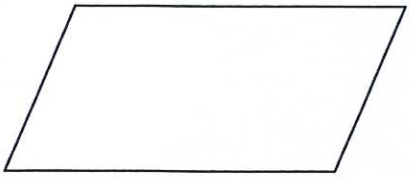
A 1,400 ÷ 14 = 100

B 1,400 × 14 = 19,600

C 1,400 – 14 = 1,386

D 1,400 + 14 = 1,414

27. Select all the names that could be used to describe the figure.



- ☐ Square
- ☐ Rhombus
- ☐ Parallelogram
- ☐ Rectangle
- ☐ Quadrilateral

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28. Raul made snack mix with $1\frac{3}{4}$ cups of cereal, $\frac{7}{8}$ cups of pretzels, and $\frac{3}{4}$ cup of raisins. How many cups of snack mix did he make in all? Draw a diagram and write an equation to help.

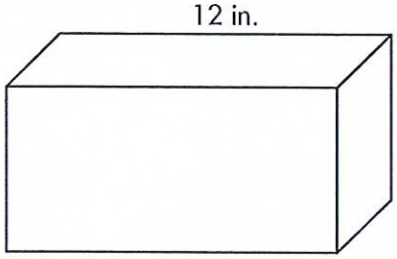
A $3\frac{3}{8}$ cups

B $2\frac{3}{8}$ cups

C $\frac{5}{8}$ cup

D $\frac{1}{8}$ cup

29. The volume of the box is 240 cubic inches. Which could be the dimensions of the box?



A length: 12 inches
width: 4 inches
height: 5 inches

B length: 12 inches
width: 12 inches
height: 12 inches

C length: 20 inches
width: 12 inches
height: 11 inches

D ength: 114 inches
width: 12 inches
height: 114 inches

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30. Chera bought $1\frac{3}{4}$ pounds of elbow pasta, $2\frac{1}{2}$ pounds of shell pasta, and some tube pasta for a pasta salad. She bought 5 pounds of pasta total. How much tube pasta did she buy?

A $\frac{1}{2}$ pound

B $\frac{3}{4}$ pound

C $1\frac{3}{4}$ pounds

D $4\frac{1}{4}$ pounds

31. Point F is 4 units away from the origin along the x-axis, and is 2 units away along the y-axis.

Which of the following could be the coordinates of Point F?

A (4, 6)

B (6, 2)

C (4, 2)

D (2, 4)

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32. Quincy is making gravy. He uses the following recipe.

Ingredients	Amount Needed for 1 jar of Gravy
Butter	$\frac{1}{8}$ cup
Flour	$\frac{1}{4}$ cup
Chicken Broth	$\frac{1}{2}$ cup

Quincy has 1 cup of flour. If he wants to use all of the flour, how many jars of gravy can he make?

Part A

Which equation can be used to solve the problem?

A $1 \times \frac{1}{4} = \frac{1}{4}$

B $1 \div \frac{1}{4} = \frac{1}{4}$

C $1 \times \frac{1}{4} = 4$

D $1 \div \frac{1}{4} = 4$

Part B

Quincy used all of the flour to make the gravy. How many ¼ -jar servings of gravy did Quincy make?

A 16 servings

B 8 servings

C 4 servings

D $\frac{1}{4}$ serving

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33. Greg made 78 mats for charity this year. Jason made $1\frac{1}{3}$ as many mats as Greg. Who made more mats? How do you know?

A Greg made more mats because multiplying 78 by a fraction or mixed number will result in a number less than 78.

B Jason made more mats because multiplying 78 by a fraction or mixed number will result in a number greater than 78.

C Greg made more mats because multiplying 78 by a mixed number greater than 1 will result in a number less than 78.

D Jason made more mats because multiplying 78 by a mixed number greater than 1 will result in a number greater than 78.

34. Jerome brought $\frac{7}{8}$ loaf of banana bread to give to his coaches. He gave $\frac{1}{4}$ of the banana bread to his basketball coach. How much banana bread did Jerome give to his basketball coach?

A $\frac{9}{8}$ loaf

B $\frac{5}{8}$ loaf

C $\frac{7}{32}$ loaf

D $\frac{8}{12}$ loaf

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35. Look at the two figures below.

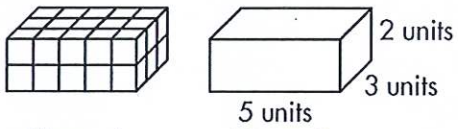

Figure A Figure B

Which statement about the volumes of the figures is true?

A The volume of Figure B is greater than the volume of Figure A.

B The volume of Figure A is greater than the volume of Figure B.

C The volume of each figure is 30 cubic units.

D The volume of Figure A can not be calculated.

36. The solution to a problem is $12 \div 13 = \frac{12}{13}$. Which problem could be solved by the solution?

A 12 box tops were collected on Monday. 13 box tops were collected on Tuesday. How many box tops were collected on Monday and Tuesday?

B 12 boxes of craft sticks are being shared among 13 tables at the art fair. If the craft sticks are shared equally, how many boxes of craft sticks will each table get?

C 12 students each donated 13 food items at the food drive. How many food items did they donate all together?

D 13 cats and 12 dogs were at the shelter. How many more cats than dogs were at the shelter?

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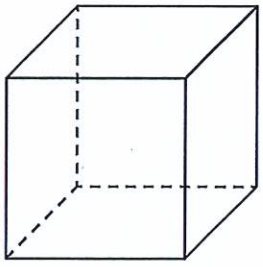
37. The figure below is a unit cube. What is the volume of a unit cube?



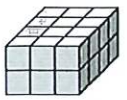
A six square units

B twelve units

C one cubic unit

D one unit

38. What is the volume of the figure?



= 1 cubic cm

39. a. What is the value of the missing number in the equation?

$2.456 \times \square = 245.6$

A 100

B 10

C 0.1

D 0.01

b. What is the value of the missing number in the equation?

$2.456 \times \square = 0.2456$

A 100

B 10

C 0.1

D 0.01

40. Which expression is equivalent to $\frac{3}{4} + \frac{5}{8}$?

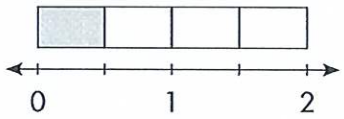
A $\frac{15}{8} + \frac{15}{8}$

B $\frac{8}{8} + \frac{8}{8}$

C $\frac{3}{8} + \frac{5}{8}$

D $\frac{6}{8} + \frac{5}{8}$

41. Which equation is being modeled below?



A $\frac{1}{4} \div 2 = \frac{1}{2}$

B $\frac{1}{2} \times 2 = \frac{1}{4}$

C $\frac{1}{4} \times 2 = \frac{1}{2}$

D $2 \div \frac{1}{4} = \frac{1}{2}$

Multiplication facts 2-12

Math Drills Worksheet

9 × 8	4 × 10	8 × 10	4 × 6	11 × 7	12 × 11	10 × 7	5 × 2	4 × 3	8 × 8
4 × 7	2 × 6	7 × 7	9 × 7	10 × 9	6 × 9	3 × 12	6 × 3	6 × 5	12 × 9
10 × 4	11 × 12	7 × 11	3 × 11	9 × 2	12 × 3	7 × 9	9 × 6	9 × 5	7 × 3
8 × 4	4 × 5	8 × 7	9 × 10	3 × 9	6 × 12	5 × 4	10 × 10	2 × 7	8 × 3
5 × 12	3 × 3	11 × 9	7 × 12	9 × 11	8 × 12	2 × 9	6 × 6	10 × 12	11 × 8
10 × 6	8 × 2	11 × 11	7 × 6	10 × 11	7 × 8	8 × 5	3 × 8	5 × 8	6 × 4
5 × 5	3 × 7	5 × 7	11 × 5	6 × 8	11 × 6	5 × 9	11 × 2	6 × 7	6 × 2
2 × 5	3 × 5	4 × 8	4 × 9	2 × 11	5 × 6	4 × 11	11 × 4	11 × 10	12 × 10
8 × 11	10 × 8	5 × 10	9 × 9	10 × 5	4 × 4	7 × 10	9 × 3	3 × 10	8 × 6
3 × 4	8 × 9	9 × 4	7 × 2	11 × 3	7 × 5	3 × 6	2 × 3	9 × 12	6 × 11

Division facts (dividends up to 144)

Division Practice Worksheet

18 ÷ 3 =	40 ÷ 5 =	36 ÷ 4 =	90 ÷ 9 =	24 ÷ 6 =
27 ÷ 9 =	3 ÷ 1 =	99 ÷ 9 =	110 ÷ 11 =	60 ÷ 10 =
100 ÷ 10 =	56 ÷ 8 =	21 ÷ 3 =	9 ÷ 9 =	18 ÷ 9 =
10 ÷ 5 =	20 ÷ 4 =	70 ÷ 7 =	8 ÷ 8 =	121 ÷ 11 =
16 ÷ 2 =	30 ÷ 5 =	12 ÷ 4 =	50 ÷ 10 =	110 ÷ 10 =
60 ÷ 6 =	9 ÷ 1 =	10 ÷ 2 =	88 ÷ 11 =	96 ÷ 12 =
88 ÷ 8 =	44 ÷ 4 =	22 ÷ 11 =	20 ÷ 10 =	27 ÷ 3 =
24 ÷ 4 =	28 ÷ 4 =	4 ÷ 4 =	44 ÷ 11 =	11 ÷ 1 =
14 ÷ 7 =	72 ÷ 9 =	81 ÷ 9 =	42 ÷ 6 =	66 ÷ 6 =
5 ÷ 1 =	63 ÷ 7 =	72 ÷ 8 =	49 ÷ 7 =	30 ÷ 3 =
45 ÷ 9 =	55 ÷ 11 =	45 ÷ 5 =	2 ÷ 1 =	35 ÷ 5 =
66 ÷ 11 =	40 ÷ 8 =	36 ÷ 9 =	77 ÷ 7 =	40 ÷ 4 =
30 ÷ 10 =	77 ÷ 11 =	56 ÷ 7 =	120 ÷ 10 =	48 ÷ 4 =
64 ÷ 8 =	12 ÷ 2 =	24 ÷ 3 =	48 ÷ 8 =	90 ÷ 10 =
21 ÷ 7 =	35 ÷ 7 =	33 ÷ 11 =	54 ÷ 6 =	32 ÷ 8 =
28 ÷ 7 =	15 ÷ 5 =	18 ÷ 6 =	10 ÷ 10 =	132 ÷ 12 =
8 ÷ 2 =	72 ÷ 6 =	60 ÷ 12 =	22 ÷ 2 =	6 ÷ 2 =
30 ÷ 6 =	20 ÷ 2 =	84 ÷ 7 =	15 ÷ 3 =	6 ÷ 3 =
55 ÷ 5 =	33 ÷ 3 =	72 ÷ 12 =	99 ÷ 11 =	96 ÷ 8 =
48 ÷ 6 =	18 ÷ 2 =	12 ÷ 6 =	80 ÷ 10 =	7 ÷ 7 =