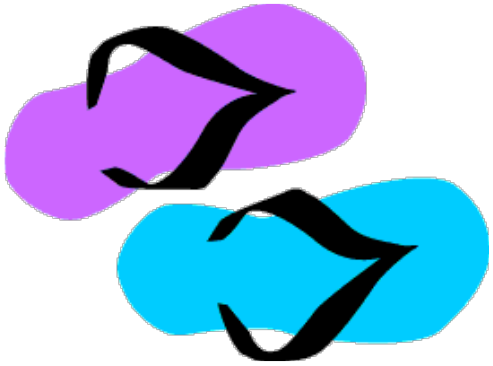
MATH PACKET



for

Students Entering the **Fifth Grade Compacted Math Class**

Students Name: _____

First and Last

Student's **Fifth** Grade **Homeroom** Teacher: _____

Parent's Signature: _____

Welcome to the summer math packet for students entering the fifth grade compacted math class. Activities are designed to support instruction in the MCPS curriculum in both its content and presentation. Activities may be done independently or with a parent, guardian, or older brother or sister. Talking about the problem can be an important part of completing some activities.

How Wayside's Summer Math Program Works:

- Students set their own goals for completing math activities.
- Students use the math packet to complete and record responses for the activities.

SOLVE THESE PROBLEMS **WITHOUT THE USE OF A CALCULATOR** AND SHOW ALL WORK

Operations and Algebraic Thinking

1. Write a numerical expression for three times the sum of nine and seven.

2. Write the first five terms in the pattern:
   Start with zero. The rule is add 17.

3. Simplify **28 – 24 ÷ 3 + (17 - 9)**

4. Complete the table. Write a rule for completing the table:

Input	Output
3	18
5	30
8	48
	54
	72

Rule: _____

5. The table below shows the number of gallons of gasoline in the gas tank each second as it fills. If the pattern continues, how much gas will be in the tank after 6 seconds?

Seconds Pumping Gasoline	1	2	3	4
Gallons in the Tank	0.15	0.30	0.45	0.60

6. Which expression shows how to solve 7 x 63 with mental math.

A. (7x6) + (7x3)

B. (7x60) + (7 x 3)

C. (7x60) + (7x30)

D. (7x6) + (7x30)

Number and Operations in Base Ten

7. Write the number **eight and twenty - eight thousandths** in standard form.

8. Order the following from greatest to least:

27.041 27.014 27.104 27.410

9. Write the following in standard form.

(3x100) + (7x10) + (2x1) + (5x$\frac{1}{10}$) + (8x$\frac{1}{100}$)

10. Write $\mathbf{10^4}$ in standard form.

11. Megan's check for lunch at the Luigi's was $13.87. She paid with a 20 dollar bill. How much change did she receive?

12. Describe the rule for the following pattern and name the next three terms.

120,000 12,000 1,200 120 _____ _____ _____

Rule: _____

13. Insert > , < or = to make the following statement true. **0.055**

_____ 0.20

14. Write **3,409.7** in expanded form.

15. Write the following words in numerals:

One hundred five and twenty - nine thousandths

16. Round **273.452** to the nearest tenth.

17. What is the value of the underlined digit in the number below?

5<u>7</u>,035,189

18. Insert > , < or = to make the following statement true.

10.9 _____ 10.24

Find the sum, difference, product or quotient. Show all work.

19. **3,684 ÷ 12 =**	20. **5,906 x 87 =**
21. **27 + 8.7 =**	22. **6864 ÷2 =**
23. **9172 – 316 =**	24. **5000 – 987 =**
25. **6 – 2.98 =**	26. **596 + 1,238 + 26 + 5 =**

Number and Operations – Fractions

27. Katie works 2 days a week after school. On Monday she works 2 ½ hours and on Wednesday she works 3 2/3 hours. How many hours more does she work on Wednesday?

28. It takes ¾ cup of ice cream and ½ cup milk to make a milkshake. How many cups is that altogether?

29. Jimmy lives 5/6 of a mile from school. Billy lives twice as far as Jimmy. How far does Billy live from school?

30. Three students shared a pizza. One student ate 1/8 of the pizza, another ate 1/4 of the pizza and the third student ate the rest. What fraction of the pizza was the third student's portion?

31. $\frac{1}{6}$ of the seats in the auditorium were reserved for parents and 1/8 of the seats was reserved for the teachers. What fraction of the seats was reserved altogether and what fraction was left for general admission?

Find the sum or difference. Show all work.

32. $3 - 1\frac{2}{3} =$	33. $\frac{1}{5} + \frac{3}{4} =$
34. $1\frac{7}{8} - \frac{2}{3} =$	35. $8 - 3\frac{5}{9} =$
36. $3\frac{1}{6} - \frac{2}{3} =$	37. $3\frac{3}{4} + 1\frac{2}{3} =$

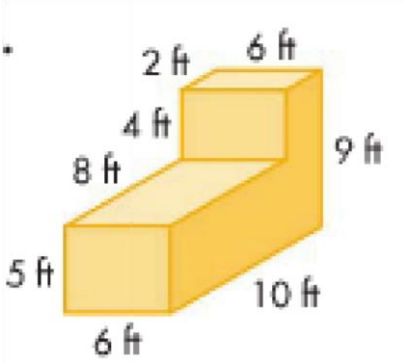
Measurement and Data

38. Leah is 52 inches tall and Carol is 4 feet 7inches tall. Which girl is taller?

How much taller is she?

39. Mike's beach towel is 1 yard long. What measure is equivalent to 1 yard, in inches?

40. What is the volume of the irregular figure shown below?

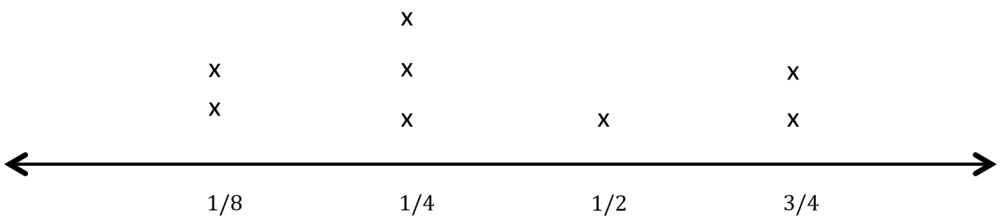


41. Sebastian hiked a 13-kilometer trail at Great Peak. How many **meters** did Sebastian hike?

42. Tyler has a container with 2.95 liters of laundry detergent. How many **milliliters** of detergent are in the container?

43. A class was picking straws from a big pile and then using a ruler to measure the length of each straw. They recorded the lengths of the straws picked in the line plot below. Use the line plot to answer the questions that follow.

Lengths of Straws



Length (inches)

a. Which straw length was the most frequent? _____

b. What is the total length of all the straws in the pile? _____

Geometry

44. Which quadrilateral has two acute angles, two obtuse angles, and two pairs of opposite parallel sides?

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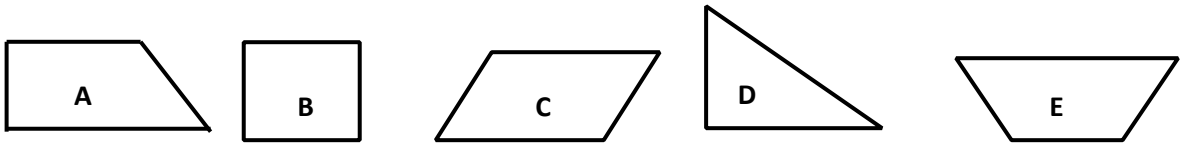
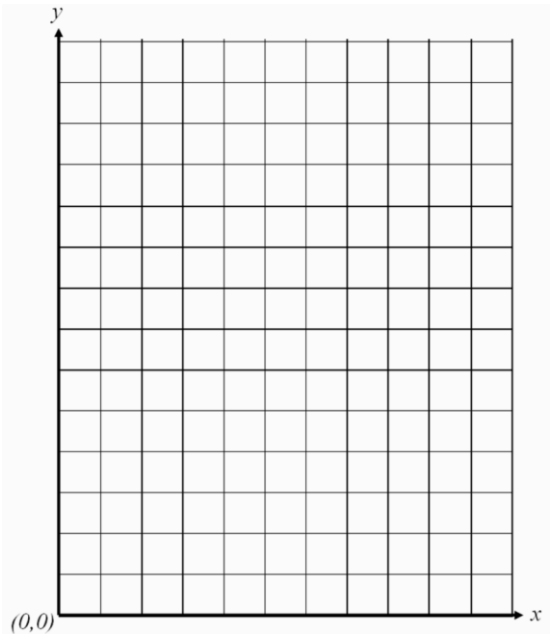


45. Plot the following points on the coordinate plane:

- A (1 ,2) B (1, 5) C (5, 2) D (5, 5)

- Connect the points and name the figure_____

- Find the area of the figure_____

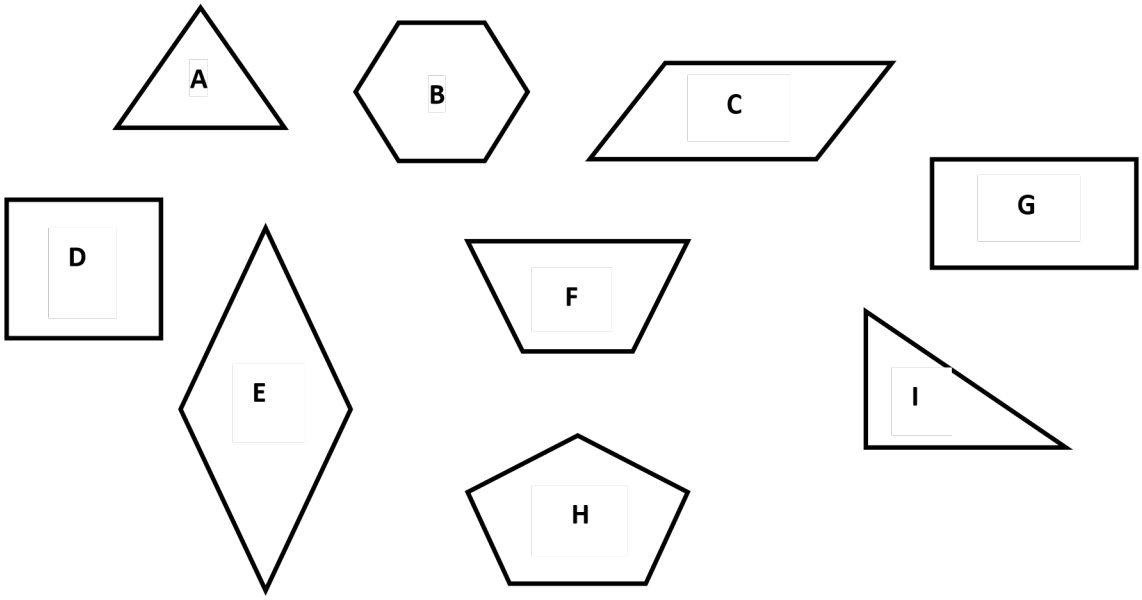


46. Use the clues below to identify the figure:

- My figure has four sides.
- My figure has opposite sides that are parallel.
- All of my figure's sides are congruent.
- My figure has two obtuse angles and two acute angles.

Name of the figure: _____

47.



Write the letter of all the shapes above that fit into each of the categories below. (You may use a shape more than once.)

Contain at least 1 right angle_____

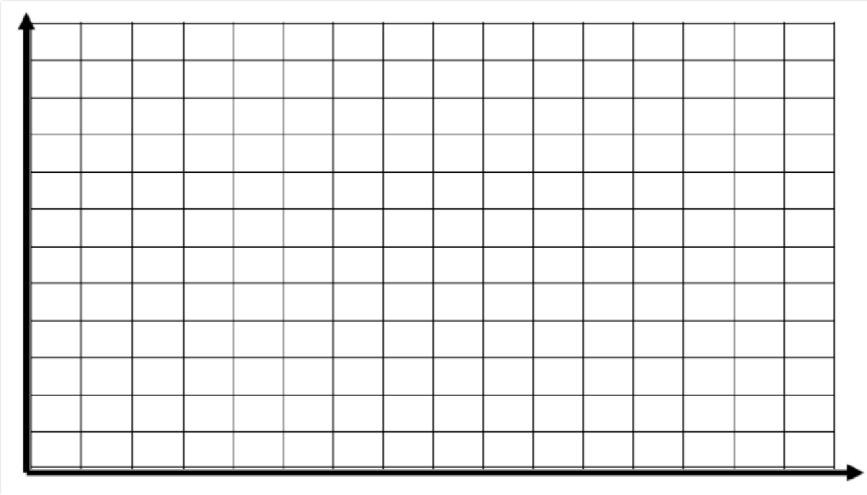
Parallelogram _____

Quadrilateral_____

Rectangle_____

48. The temperature in Michelle's house from 9:00 a.m. to 7:00 p.m. is recorded in the table below. Plot the points on the graph. Remember to label the graph.

Time	Temperature
9 am	65˚
11 am	60˚
1 pm	63˚
3 pm	68˚
5pm	65˚
7 pm	60˚



What was the **approximate** temperature in Michelle's house at 2:00 p.m. ? _____

What was the difference in temperature from 1:00 p.m. to 3:00 p.m. ? _____

1 x0	1 x1	1 x2	1 x3
1 x4	1 x5	1 x6	1 x7
1 x8	1 x9	2 x0	2 x1
2 x2	2 x3	2 x4	2 x5

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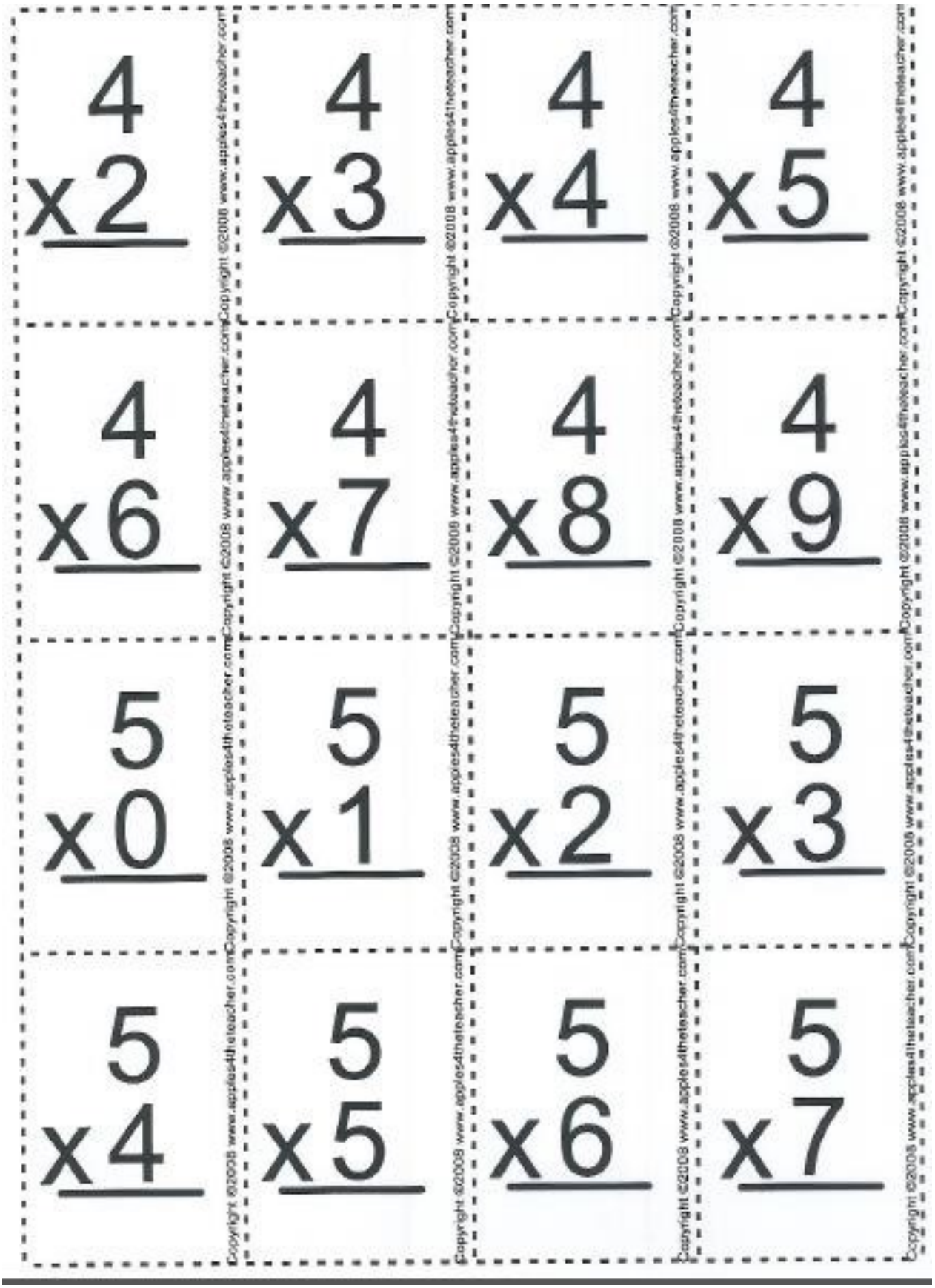
4 x2
4 x3
4 x4
4 x5
4 x6
4 x7
4 x8
4 x9
5 x0
5 x1
5 x2
5 x3
5 x4
5 x5
5 x6
5 x7
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5 x 8	5 x 9	6 x 0	6 x 1
6 x 2	6 x 3	6 x 4	6 x 5
6 x 6	6 x 7	6 x 8	6 x 9
7 x 0	7 x 1	7 x 2	7 x 3

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7 x4	7 x5	7 x6	7 x7
7 x8	7 x9	8 x0	8 x1
8 x2	8 x3	8 x4	8 x5
8 x6	8 x7	8 x8	8 x9

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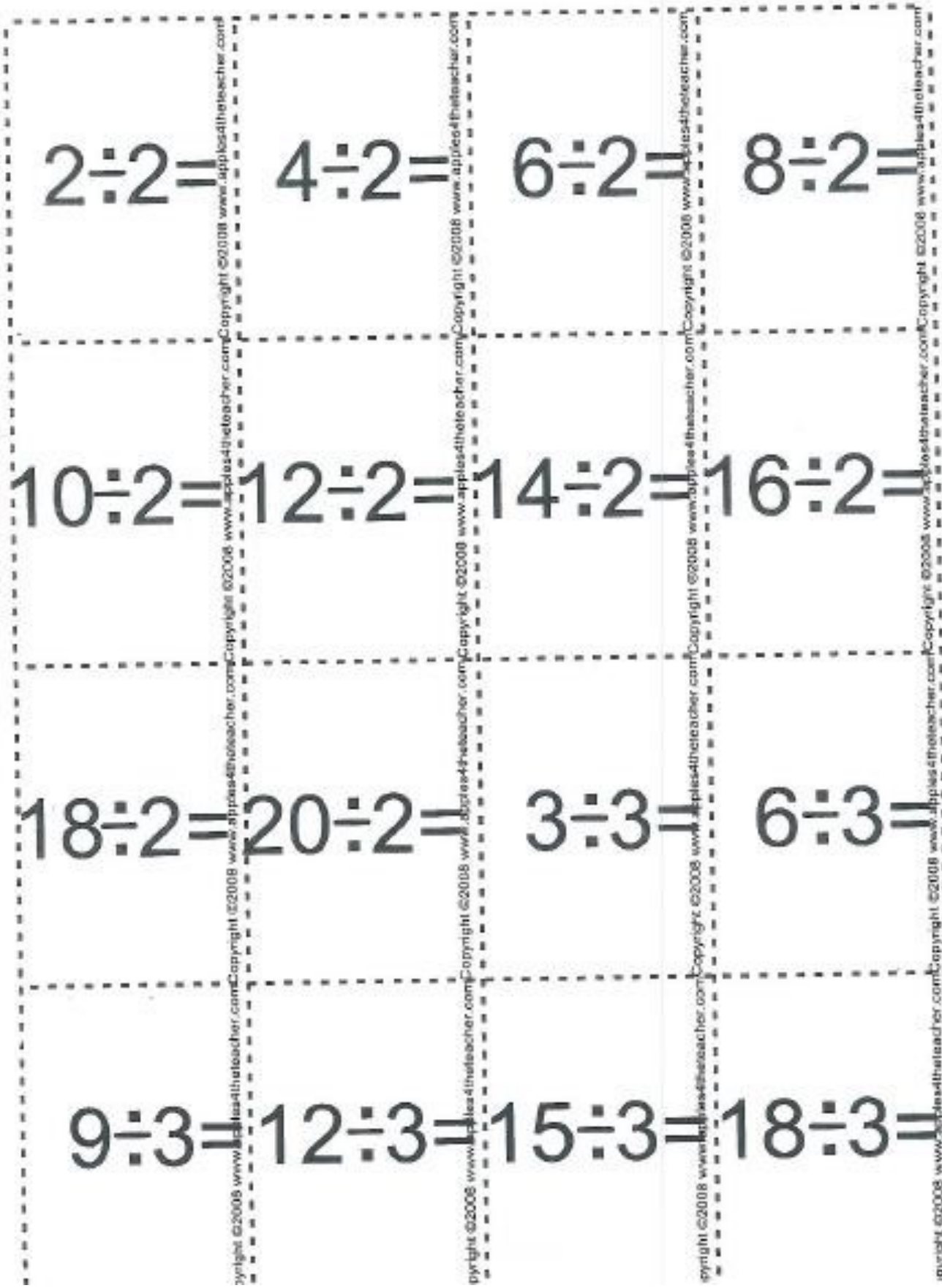
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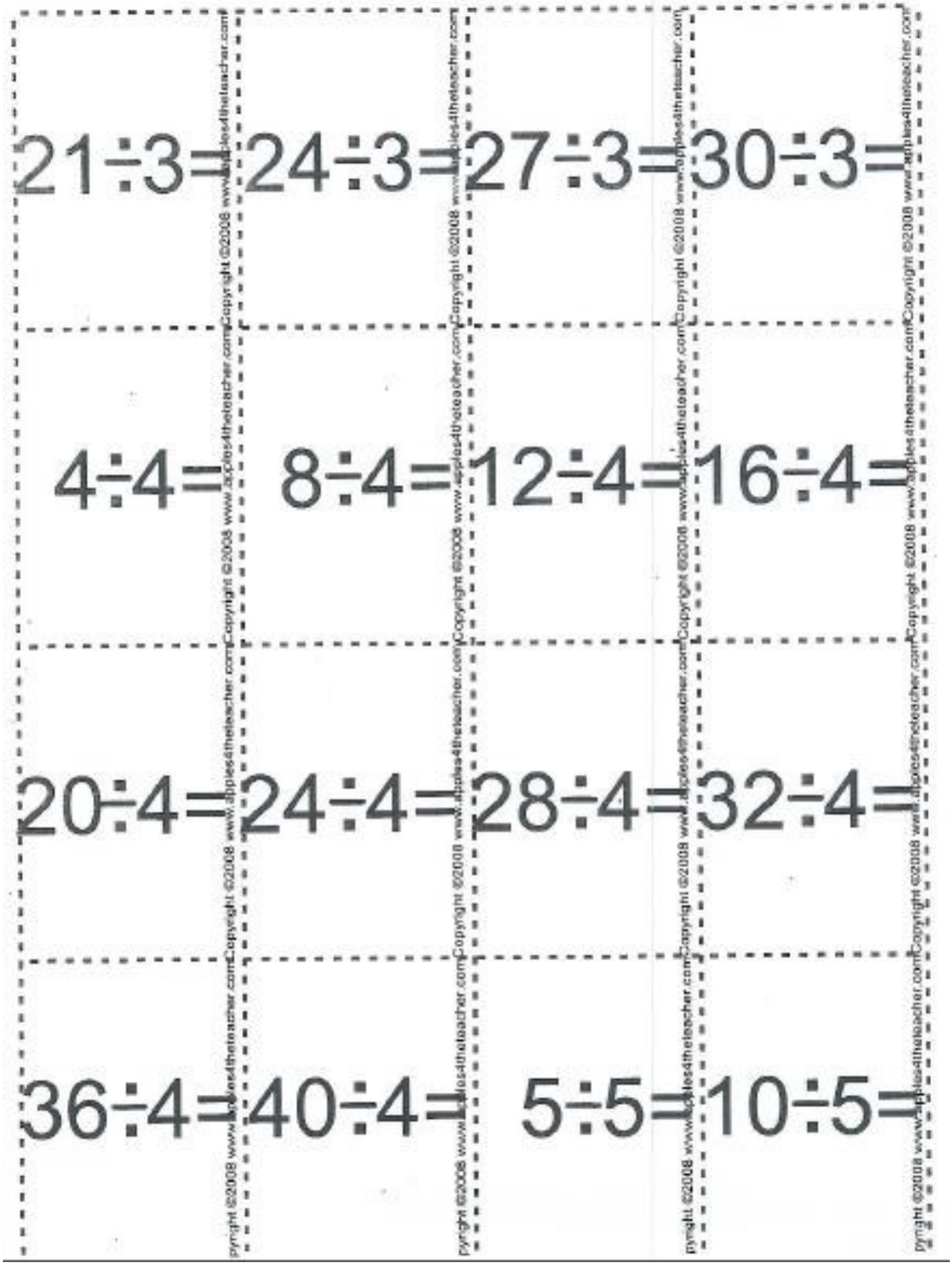
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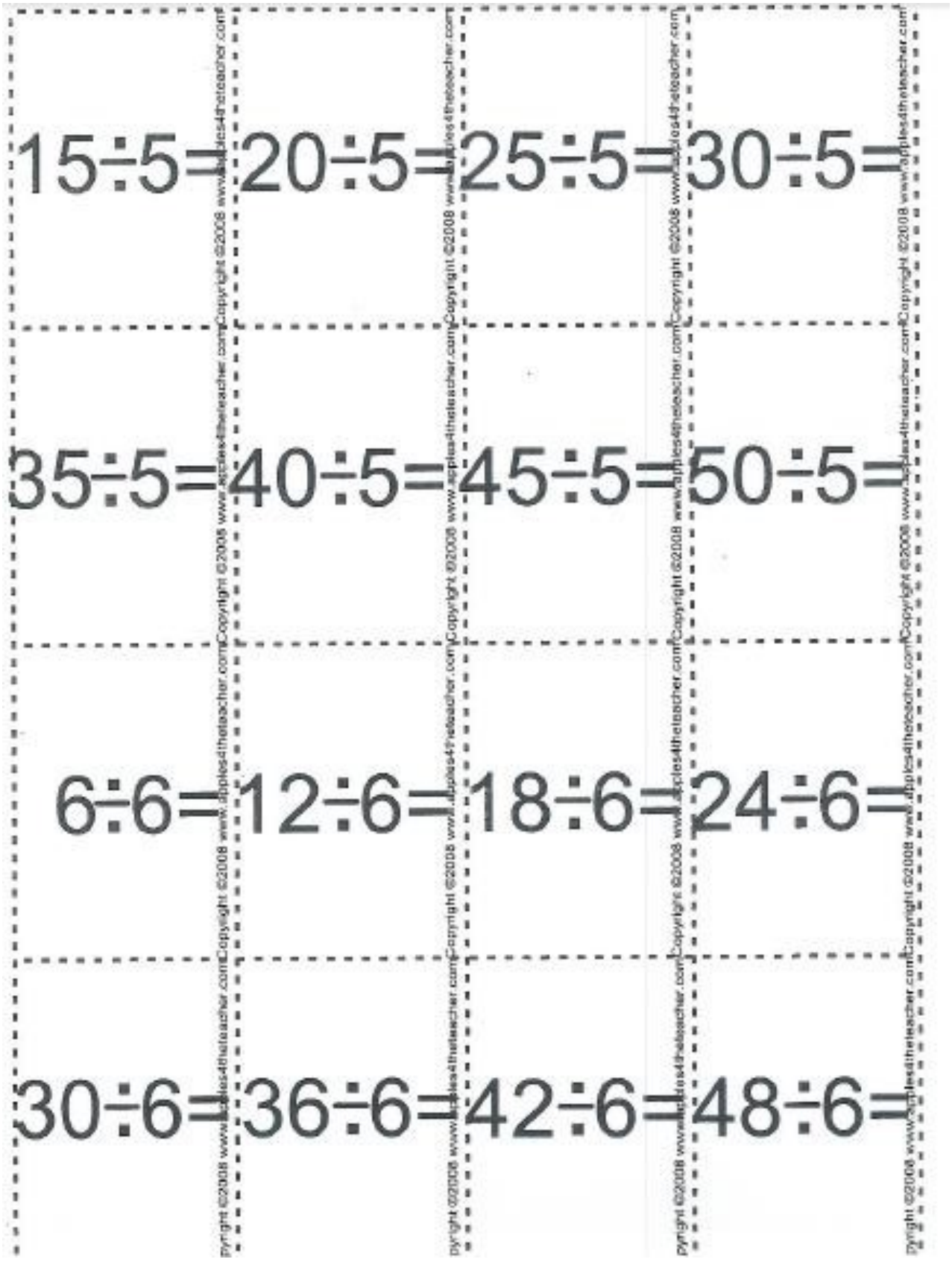
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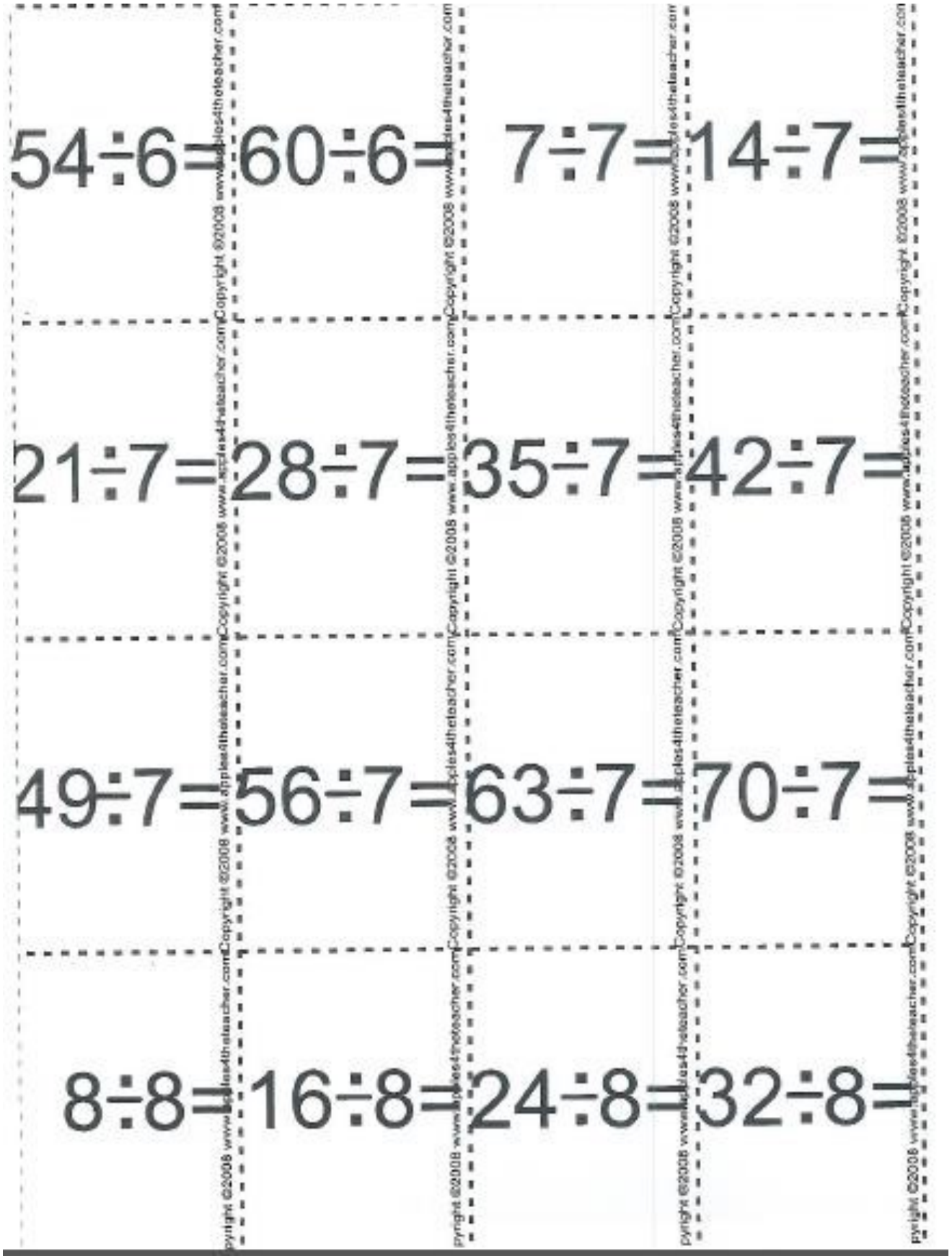
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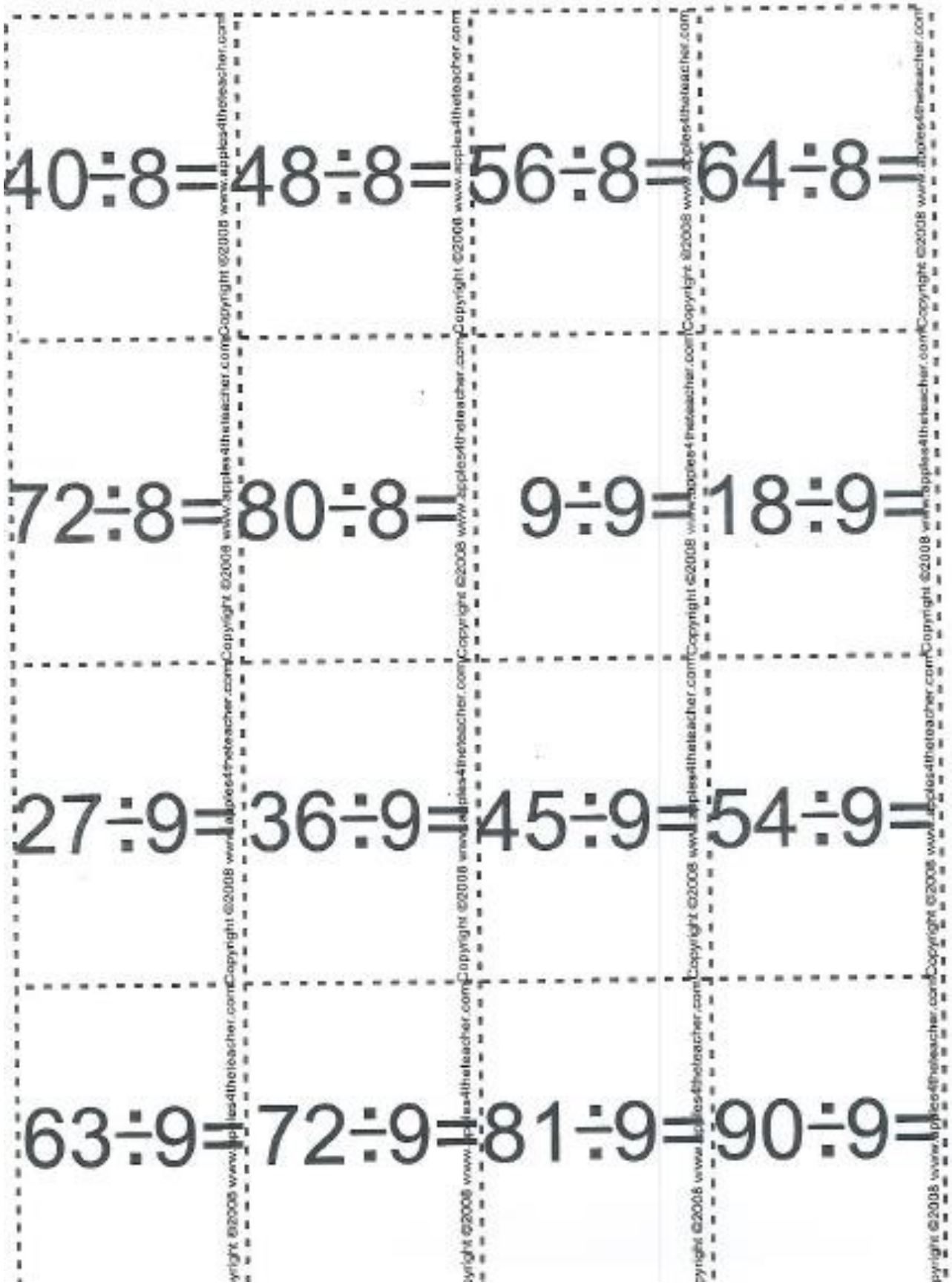
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