FOR STUDENTS ENTERING GRADE 6

Dear Parents and Students,

Attached, please find this year's summer practice packet for math. These packets will be due to the homeroom or mathematics teacher on the first day of school and will count as a grade for the first trimester. Please see rubric below for grading details. As you will see on the rubric, in order to receive the full 30 points, all problems must be complete, neat and organized, with detailed work shown for each problem (where applicable). Thank you in advance for your focused effort on this year's summer math packet. It is our hope that completing the math packet will reinforce the skills taught this year. We hope you enjoy a fantastic summer and look forward to working with you again this fall.

Sincerely,

Dawn Parker

Dawn Parker

Summer Math Packet Rubric

Name: _____

A. All problems in the packet are complete.

Points: 10 8 6 4 2

B. Detailed work process is shown for each problem (use extra paper as needed).

Points: 10 8 6 4 2

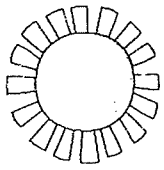
C. Work is neat and organized.

Points: 5 4 3 2 1

D. Summer Practice Packet is handed in on time (the first day of school). One point will be deducted for e ach day the assignment is late.

Points: 5 4 3 2 1

Total Points Possible: 30 Points Earned: _____



CONCEPT REMINDERS

- Place Value: Each digit in a number has a value based on its position. For example, in 4,305,827, the digit 4 is in the millions place and is worth 4,000,000.
- Reading and Writing Numbers: You can write numbers in standard form (4,305,827), word form (four million, three hundred five thousand, eight hundred twenty-seven), or expanded form (4,000,000 + 300,000 + 5,000 + 800 + 20 + 7).
- Rounding Numbers: To round a number, look at the digit to the right of the place you're rounding to. If it's 5 or more, round up. If it's 4 or less, round down.
- Adding & Subtracting: Line up the digits by place value. Start from the right and regroup when necessary.
- Multiplying Whole Numbers: Multiply the ones, then the tens, and so on. Don't forget to add your partial products!
- Dividing Whole Numbers: Division tells how many times one number fits into another. Long division includes a divisor, dividend, and quotient.

PLACE VALUE & WHOLE NUMBER OPERATIONS PRACTICE

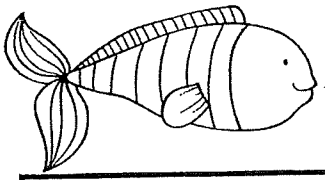
1. Write 8,420,391 in expanded form.	2. Round 745,829 to the nearest ten thousand.	3. Use < or > to compare: 509,204 ___ 509,402
4. What is the value of the 7 in 7,341,205?	5. Add: 62,958 + 14,233	6. Subtract: 90,006 - 78,945

CONCEPT REMINDERS

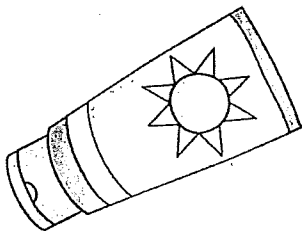
- A decimal is a number that shows part of a whole using place value. The decimal point separates the whole number part from the fractional part.
- Place values after the decimal point go from tenths, hundredths, to thousandths.
- To compare decimals, line up the digits by place value. Start from the left and compare each digit.
- To round decimals, look at the digit to the right of the place you're rounding to.
- When adding or subtracting decimals, line up the decimal points and fill in any missing digits with zeros.
- To multiply decimals, ignore the decimals, multiply, and then count total decimal places in both factors.
- To divide decimals, move the decimal in the divisor to make it a whole number and do the same to the dividend. Then divide as normal.

COMPARING DECIMALS PRACTICE

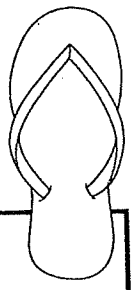
1. Order the numbers from least to greatest: 7.18, 7.817, 7.82	2. Use < or > to compare: 0.7 ___ 0.65
3. Order the numbers from least to greatest: 3.847, 3.63, 3.6, 3.525	4. Use < or > to compare: 1.03 ___ 1.3
5. Mike measured the length of three pencils. The first pencil was 7.65 inches long, the second pencil was 7.56 inches long, and the third pencil was 7.506 inches long. Can you list the pencils in order from shortest to longest?	
9. In a 400-meter dash, Athlete A finished in 50.32 seconds, Athlete B finished in 50.23 seconds, and Athlete C finished in 50.302 seconds. Rank the athletes from the fastest to the slowest based on their finishing times.	



ROUNDING DECIMALS PRACTICE



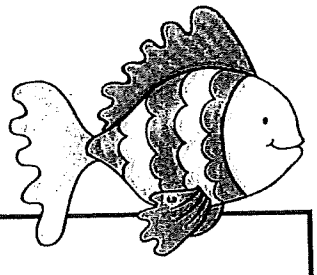
1. Round to the nearest whole number: 5.8	2. Round to the nearest whole number: 18.5	3. Round to the nearest tenth: 9.06
4. Round to the nearest hundredth: 44.242	5. Round to the nearest whole number: 9.665	6. Round to the nearest tenth: 3.74
7. A cookie recipe calls for 2.75 cups of flour, but Liam only has a cup that measures in whole numbers. To the nearest whole cup, how much flour should Liam use?	8. The morning temperature was 67.89 degrees Fahrenheit. Round this temperature to the nearest degree.	9. During a visit to the aquarium, a group of students measured the length of a fish as 12.35 centimeters. If they round this measurement to the nearest tenth, how long is the fish?
10. After a recent storm, a rain gauge collected 5.678 inches of rain. To the nearest tenth, how many inches of rain were collected?	11. The school's track team ran a relay race in 3.886 minutes. Round their time to the nearest hundredth to determine their official time.	12. Emma's mom sent her to buy 2.345 kilograms of apples and 1.789 kilograms of bananas. If she rounds each quantity to the nearest tenth, how many kilograms of fruits does she buy in total?



DIVIDING DECIMALS PRACTICE

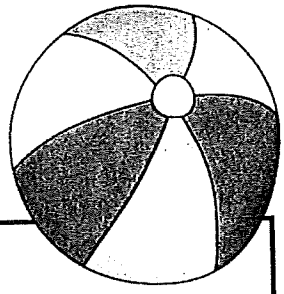
1. $3.6 \div 2$	2. $6 \div 4$	3. $5.4 \div 3$
4. $12 \div 5$	5. $7.2 \div 6$	6. $8 \div 10$
7. $4.5 \div 3$	8. $9.6 \div 4$	9. $10 \div 4$
10. $1.2 \div 2$	11. $15 \div 8$	12. $2.7 \div 3$

SIMPLIFYING FRACTIONS PRACTICE



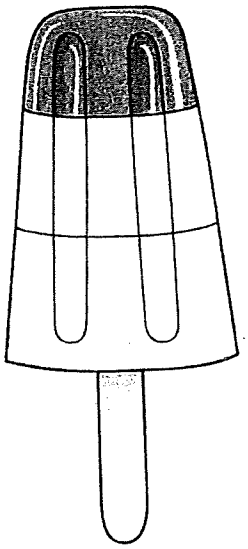
Simplify each fraction to its lowest terms.

1. $\frac{2}{4}$	2. $\frac{6}{8}$	3. $\frac{10}{12}$
4. $\frac{8}{14}$	5. $\frac{8}{10}$	6. $\frac{13}{13}$
7. $\frac{3}{6}$	8. $\frac{12}{14}$	9. $\frac{6}{9}$
10. $\frac{4}{12}$	11. $\frac{4}{10}$	12. $\frac{9}{16}$



MULTIPLYING FRACTIONS PRACTICE

1. $\frac{2}{3} \times 4 =$	2. $\frac{3}{9} \times 6 =$	3. $\frac{1}{12} \times 8 =$
4. $\frac{4}{11} \times 3 =$	5. $\frac{3}{5} \times 2 =$	6. $\frac{10}{13} \times 5 =$
7. $\frac{1}{2} \times 7 =$	8. $\frac{6}{11} \times 3 =$	9. $\frac{3}{5} \times 6 =$
10. $\frac{1}{6} \times 2 =$	11. $\frac{5}{9} \times 4 =$	12. $\frac{3}{10} \times 5 =$



CONCEPT REMINDERS

An expression is a math phrase that can include numbers, variables, and operations (but no equals sign).

To evaluate an expression, substitute the value of the variable and follow the order of operations.

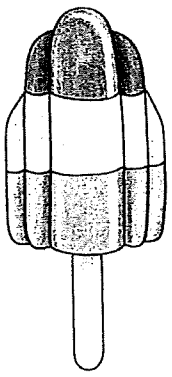
PEMDAS is used for order of operations: Parentheses, Exponents, Multiplication & Division (left to right), Addition & Subtraction (left to right).

Identify and Write Patterns in Number Sequences: Look for how the numbers in a sequence are changing. Are they increasing or decreasing? Is the pattern additive, multiplicative, or something else? Use this rule to find the next numbers in the sequence.

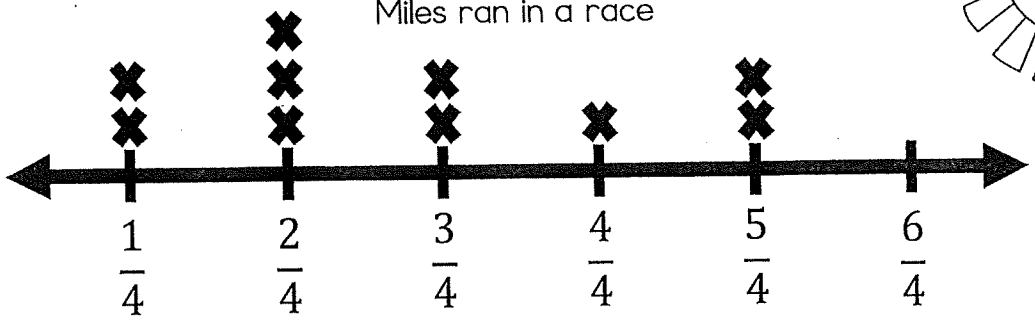
ORDER OF OPERATIONS PRACTICE

1. $5 + (6 \times 2) =$	2. $18 \div 3 + 7 =$	3. $8 \div 4 + 2 \times 9 =$
4. $4 + 9 + (7 \times 10) =$	5. $55 - 9 \times (6 - 3) =$	6. $12 \div (4 + 2) =$
7. $6 \times (4 + 1) \div 2 =$	8. $(10 - 2 \times 3) + 1 =$	9. $(16 - 5) \times (12 \div 3) =$
10. $(2 + 6 \div 3) - 2 =$	11. $2 \times 3 + 4 \times 5 =$	12. $(15 \div 5 + 4) \times 2 =$

LINE PLOTS PRACTICE

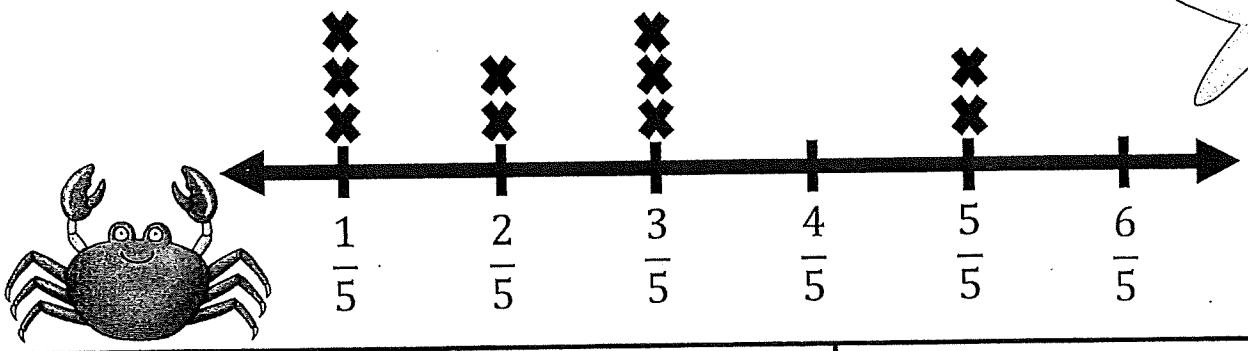


Miles ran in a race

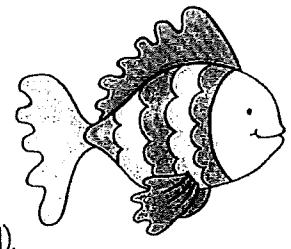


QUESTIONS	ANSWERS
1. How many people were surveyed?	
2. How many miles were completed in all?	
3. How many people completed $\frac{3}{4}$ of a mile?	
4. How far would each person have to run if the distances were distributed evenly?	

Pounds of candy received in a week



QUESTIONS	ANSWERS
1. How many people were surveyed?	
2. How many pounds of candy was received in all?	
3. How many people received one pound of candy?	
4. How much candy would each person get in the candy was redistributed evenly?	



CONCEPT REMINDERS

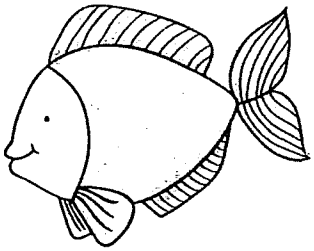
Polygons are classified by number of sides and angle properties.

Understanding Coordinate Plane

- A coordinate plane has two axes: x-axis (horizontal) and y-axis (vertical).
- Points are written as (x, y).
- In the first quadrant, both x and y are positive.

Graphing Points on a Coordinate Grid

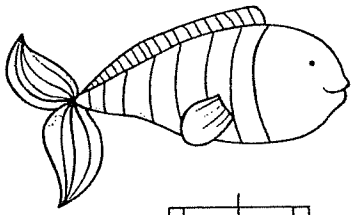
- To graph a point, start at (0,0).
- Move right for x and up for y.
- Example: (3, 2) means 3 units right and 2 units up.



CLASSIFYING SHAPES PRACTIVE

Instructions: Match the letter inside each 2D figure with the number beside the correct shape description

'WHY CAN'T FISH GO ON VACATION?'



1. Is a quadrilateral. Has no parallel lines and two pairs of adjacent, equal sides

2. Is a quadrilateral. Has only one pair of parallel lines. No sides or angles of equal length

3. Has three sides of different length. Has one, 90-degree angle

4. Is a quadrilateral. Has four 90-degree angles and sides of equal length

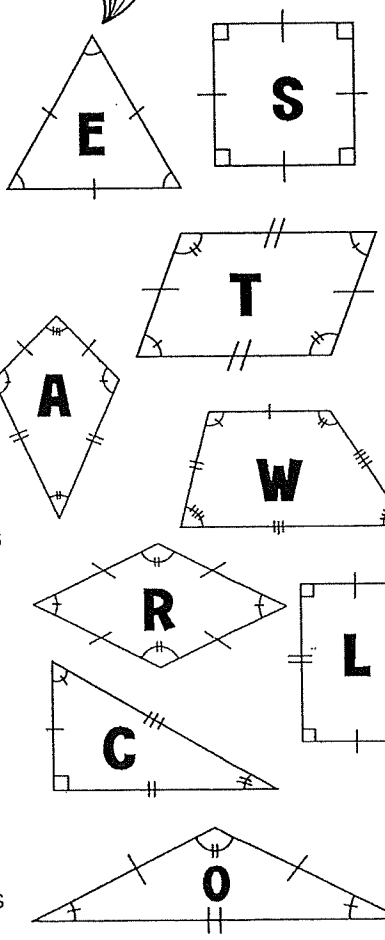
5. Is a quadrilateral. Has four equal sides and two sets of opposite angles the same degree

6. A quadrilateral with equal opposite sides and equal opposite angles

7. Is a quadrilateral. Has four 90-degree angles and equal opposite sides

8. Has three sides. Two sides are of equal lengths and has equal, opposite angles

9. Has three sides of equal lengths and three angles of equal lengths



BECAUSE THEY...

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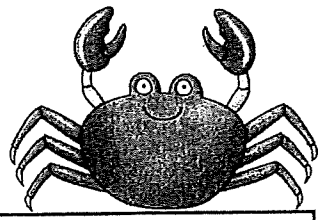
1	5	9	1	7	2	1	.	4	1	6	4	3		8	8	7	

SECTION 7 – MIXED REVIEW



Complete each problem. Show your work. Use your knowledge from all previous sections.

1) Round 6.387 to the nearest tenth.	2) What is $\frac{3}{4} + \frac{1}{8}$?	3) Convert 5 feet to inches.
4) What quadrant is (2, 5) in?	5) What is the volume of a box with length=4, width=2, height=3?	6) Simplify $\frac{12}{16}$
7) What is the next number in the pattern: 5, 10, 15, __?	8) What polygon has 6 sides?	9) Evaluate: $(4 + 2) \times 3$
10) What is $6.2 \div 2$?	11) True or False? $\frac{24}{26}$ and $\frac{30}{38}$ are equivalent fractions	12) Compare, using a < or > 0.63 _____ 0.603