DADE COUNTY COUNCIL OF TEACHERS OF MATHEMATICS
MATHEMATICS BOWL
4th / 5th Grade Individual Problem Solving
SAMPLE PACKET

1. Moshe took a typing test to see how fast he could type. The chart below shows the number of words he typed.

Time (in minutes)	3	5	7	9
Number of Words Typed	165	275	385	495

If Moshe continues to type at the same speed, how many minutes will it take him to type 1045 words?
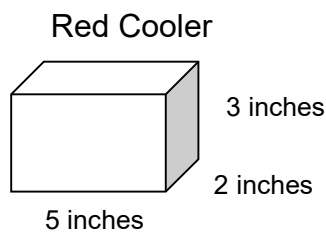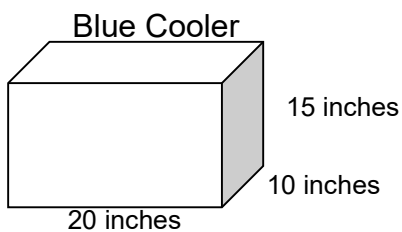
2. When Tommy, the pelican, dives into the sea, he scoops up twice its weight in fish and water. If the pelican weighs 48 pounds after he scoops up the fish and water, what is the actual weight of the pelican?

3. Taylor built a rectangular wooden picture frame. The frame has a perimeter of 78 inches. The width is 22 inches. What is the area, in square inches, of the picture frame?

4. 34 students are going to visit the museum. You can only fit 4 students in one car. What is the least number of cars needed to get **all** 34 students to the museum?

5. Zachary and his friends bought snacks when they visited the zoo. They spent 18% of their money on nuts, 45% on pizza, 25% on chips and the rest of the money on soda. What percentage of the money was spent on soda?

6. Three glasses contain 2¼, 2½, and 1⅝ cups of juice. John mixed all the juice together and then poured the same amount on each glass. How much juice is in one glass?

7. Write an operation symbol in the blank spaces to make the equation true.

$$2\tfrac{3}{4} \underline{\hspace{1cm}} 1.5 \underline{\hspace{1cm}} 1\,2/5 = 2.85$$

8. The pictures below show the dimensions of two coolers.

Blue Cooler

15 inches

10 inches

20 inches

Red Cooler

3 inches

2 inches

5 inches

How many times greater is the volume, in cubic inches, of the blue cooler than the volume of the red cooler ?

9. Each new backpack at Roy's Book Store comes with a free gift.
   The table below shows the type and the number of gifts that were placed in **50** backpacks.

Gifts	Water Bottles	Notebooks	Key Rings	Daily Planners
Number of Free Gifts	5	15	20	10

If the type and number of free gifts placed in backpacks remains the same,
how many notebooks should be placed in **200** backpacks?

10. What is the value of N in the following equation: $5N + 4 = 39$

11. Sarah is taller than David. David is shorter than Eduardo.
    Eduardo is taller than Sarah. Janet is shorter than David.
    Who is the **tallest**?

12. Haley is 13 years old. Each week she receives $0.50 for each year of her age.
In four years, she will start receiving $1 for each year of her age.
How much more allowance will Haley receive weekly?

13. Madison loves potato chips. The potato chips comes in bags of 1lb. 6 oz; 2lbs 8oz; and 1lb 9oz.
What is the total weight of all the bags of potato chips?

14. Alyce must use the order of operations to evaluate the following expression.

$$\frac{24}{3} + (16 - 3 \times 2)$$

What should be the **last step** Alyce performs if she uses the correct order of operations?

15. On a sheet of paper, Taylor drew line segment AB parallel and congruent to line segment CD.
Choose the letter of the choice that is possible. Write that letter on the answer line.

A . Both line segments form sides to the same rectangle.	C. Line segment AB is perpendicular to line segment CD.
B. Both line segment form sides to the same triangle.	D. Line segment AB forms an acute angle with line segment CD.

ANSWER PAGE

➢ Answers must be complete, including label and/or unit of measurement.

Total Score _____

Print Student's Name

_____

Print Name of School

_____

S C O R E:

Problem Solving _____

Tie Breaker _____

Total Score _____

Problem	Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

Tie Breaker

Print   Student's Name   _____

Print   School Name   _____

Emily wants to send bears to all her 8 nieces and nephews.

The cost for each bear is $8.50. She wants to buy a hat for each bear.

However, she only has $94.00.

Question: What is the most amount of money, Emily can spend on

each hat?

Answer: _____

ANSWER KEY

➤ Answers must be complete, including label and/or unit of measurement.

Total Score _____

Print Student's Name

_____

Print Name of School

_____

S C O R E:

Problem Solving   _____

Tie Breaker   _____

Total Score   _____

Problem	Answer
1	19 minutes
2	16 pounds
3	374 sq. in.
4	9 cars
5	12%
6	2 ⅛ or 2.125
7	+ —
8	100 times greater
9	60 notebooks
10	N=7
11	Eduardo
12	$10.50
13	5lbs. 7 oz.
14	8 + 10
15	A

TIE BREAKER ANSWER KEY

Print   Student's Name   _____

Print   School Name   _____

Emily wants to send bears to all her 8 nieces and nephews.

The cost for each bear is $8.50.   She wants to buy a hat for each bear.

However, she only has $94.00.

Question: What is the most amount of money, Emily can spend on

each hat?

Answer: _____ $3.25 _____