

Howard County
Public Schools
G/T Summer Packet
for Students Entering
Grade Four G/T Math

*Good for all 3rd Graders who will enter
4th Gr. G/T Math in the fall*

Name: _____

School: _____

What could be more fun
than completing a summer packet??
Stay sharp over the summer and build your brain!

Summer Work

Lindsay wants to earn enough money to buy a new flash drive for her computer. She created the following table to show the hours she was available to work every day.

| Days | Hours Available to Work |
|-----------|-------------------------|
| Saturday | 4 hours |
| Sunday | 3 hours |
| Monday | 1 hour |
| Tuesday | 1 hour |
| Wednesday | 2 hours |
| Thursday | 2 hours |
| Friday | 3 hours |

Lindsay earns \$2 per hour. She works exactly 10 hours each week. How many weeks must Lindsay work to earn enough money to buy a flash drive that costs \$100? Write your answer on the line below. Show all work below.

Lindsay must work _____ weeks.

In the space below, create two different schedules that show the 10 hours Lindsay could work.

| Day | Hours of Work |
|-------------|---------------|
| Saturday | |
| Sunday | |
| Monday | |
| Tuesday | |
| Wednesday | |
| Thursday | |
| Friday | |
| Total Hours | |

| Day | Hours of Work |
|-------------|---------------|
| Saturday | |
| Sunday | |
| Monday | |
| Tuesday | |
| Wednesday | |
| Thursday | |
| Friday | |
| Total Hours | |

Budgeting for Lamps

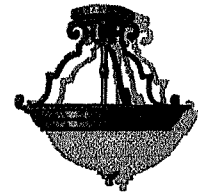
Brittany is buying lamps for her new house. These are the types of lamps she wants:



Desk Lamps
\$10.00 each



Table Lamps
\$20.00 each



Ceiling Lamps
\$40.00 each

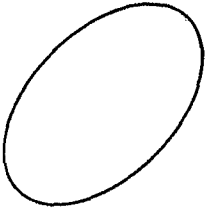
She wants **at least** 3 of each type of lamp, and she plans to spend between \$225.00 and \$300.00 in all. Fill in the chart below to show how many of each type of lamp she bought. Show all work below. (There is more than one correct answer!)

| Type of Lamp | Number of Lamps | Cost of Lamps |
|--------------|-----------------|---------------|
| Desk Lamp | | |
| Table Lamp | | |
| Ceiling Lamp | | |
| Total | | |

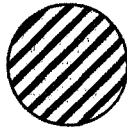
Grouping by Attributes

Sort all 6 of these objects into 2 groups so that the objects in each group have something in common. Show how you grouped the objects by writing the letters from each object into the boxes labeled Group 1 and Group 2. Then explain how you decided to group the objects.

A



C



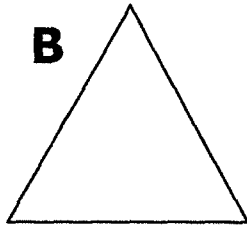
E



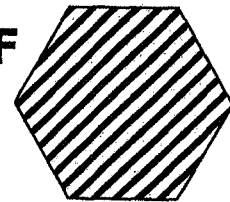
D



B



F



| Group One | Group Two |
|--|--|
| | |

Problem Solving

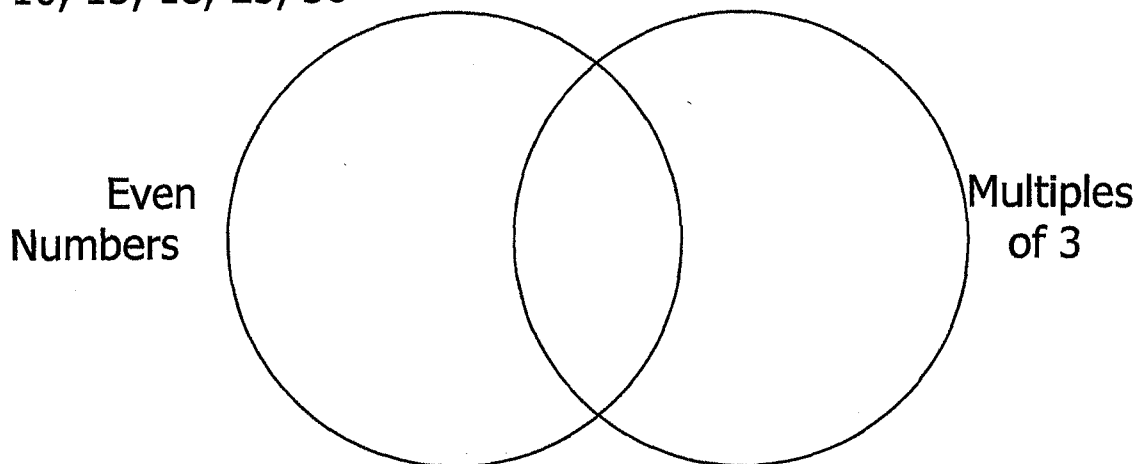
A missing number meets all of the criteria below:

- is between (5×20) and (25×10) ,
- is a multiple of 50 (is included when you count by 50s)
- has the tens digit as the largest digit.

What is the missing number?

Write each number in the correct place inside or outside the Venn diagram.

2, 9, 10, 15, 18, 25, 30



Tom is planning to order lunch. He may have one each of the following choices:

- hamburger or chicken sandwich
- a roll or a wrap
- chocolate cake, cookies, or ice cream

Create a tree diagram to show how many different lunches could he order.

MATHEMATICAL APPLICATIONS

- 1) The Howard County School Band is planning a bus trip to a band competition. There are 142 members in the band and each bus will hold 32 people. How many buses are needed for the trip? Show all work.



- 2) Brent wants to earn \$200 to buy a new iPod. He can earn money mowing lawns. Brent can earn \$10 for each lawn he mows. He can mow at most 4 lawns per week. How many weeks must Brent mow lawns to buy the iPod? Show all work.
- 3) A juice can display has 66 cans. There is one less can in each row than in the row below, with a single can in the top row. How many cans are in the bottom row? Show all work.
- 4) Every year Aunt Agnes sends you a birthday card with the amount of money that matches your age. Suppose you are 12. How much money have you been given over the years by this generous aunt? Show all work.

Make an Equation I

Place 2, 3, 6, 8, or 24 in the squares below and +, -, x, or ÷ in the circles to make true equations. No number is to be used more than once in any equation (e.g., $24 - 8 + 6 + 3 = 12$).

1. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 4$

2. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 90$

3. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 3$

4. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 13$

5. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 36$

6. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 19$

7. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 32$

8. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 9$

9. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 14$

10. $\square \bigcirc \square \bigcirc \square \bigcirc \square = 1$

It Takes Five! I

Use five 4s to make the number listed below. Rules of order apply
(e.g., make 84 using five 4s... $44 + 44 - 4 = 84$.)

1. _____ = 22

2. _____ = 56

3. _____ = 21

4. _____ = 40

5. _____ = 107

6. _____ = 8

7. _____ = 14

8. _____ = 32

It Takes Five! II

Use five 3s to make the number listed below. Rules of order apply
(e.g., make 60 using five 3s... $33 + (3 \times 3 \times 3)$.)

1. _____ = 11

2. _____ = 1

3. _____ = 36

4. _____ = 363

5. _____ = 31

6. _____ = 44

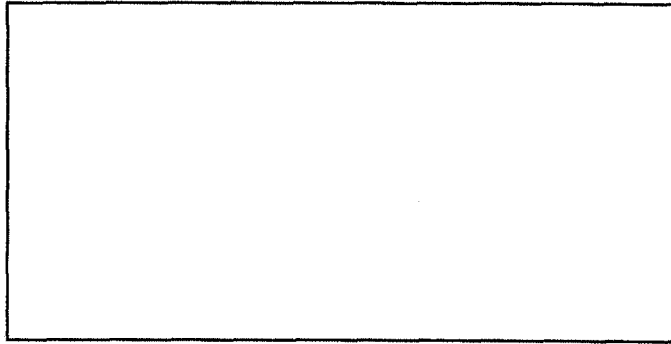
7. _____ = 15

8. _____ = 51

New Room

Mrs. Waters would like to buy a new carpet for her bedroom. How much carpeting will she need to order? Show all work.

10 ft.



14 ft.

If the carpeting she orders costs \$5.20 per foot, how much money will she spend? Show all work.

Mrs. Smith has \$1,000 to spend on her new bedroom. How much money does she have left to spend?

She buys a dresser for \$225.00 and will spend the rest on fabric for curtains. How much money can she spend on curtains?

Fraction Practice

Shade in the rectangle to represent the fraction.

$\frac{2}{3}$

$\frac{1}{4}$

$\frac{5}{6}$

$\frac{4}{5}$

Angus and his younger siblings had a race to see if any of them could run a mile. No one made it, but here are the results:

| Name | Angus | Babette | Candy | Darnell | Evan |
|--------------------|---------------|---------------|---------------|---------------|---------------|
| Fraction of a mile | $\frac{5}{6}$ | $\frac{1}{3}$ | $\frac{1}{8}$ | $\frac{2}{3}$ | $\frac{1}{4}$ |

1) Who ran the farthest? _____

2) Who is likely the youngest in the family, and why? _____

3) Who ran farther, Darnell or Angus? _____

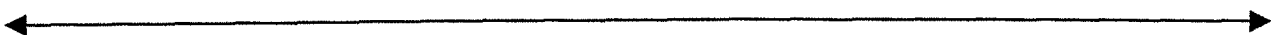
4) List two pairs of siblings who ran less than one mile combined:

_____ and _____

5) List two pairs of siblings who ran more than one mile combined:

_____ and _____

6) **CHALLENGE!** Place each child's distance on the number line below.



Time and Calendar

Show all work.

- 1) A kickball game started at 1:35 p.m. and ended at 2:45 p.m. The Panthers scored twice as many points as the Cougars. How long was the game?
- 2) The movie started at 2:30 p.m. and ended at 4:15 p.m. How long was the movie?
- 3) Amy's piano lesson begins at 11:30 a.m. and ends at 12:15 p.m. How long is the class?
- 4) Anju left her home for the mall at 11:15 a.m. and returned home at 2:45 p.m. How long was she gone?
- 5) Alejandro's mom jogs 25 minutes each day except on Saturday and Sunday. How much time does she spend running in a week?
- 6) Sito's family went on vacation for 10 days. If they left on a Monday, on which day did they return?
- 7) If February 1st is on a Thursday in a non-leap year, on which day is March 1st?
- 8) If one day has 24 hours, how many does 2 days have? 3 days? Complete the data table below.

| Number of Days | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------|---|---|---|---|---|---|
| Total Hours | | | | | | |

Computation Practice I

Show all work.

*Students should have mastery of addition, subtraction, multiplication, and division facts.

$$\begin{array}{r} 548 \\ + 100 \\ \hline \end{array}$$

$$\begin{array}{r} 794 \\ + 357 \\ \hline \end{array}$$

$$\begin{array}{r} 667 \\ + 306 \\ \hline \end{array}$$

$$\begin{array}{r} 553 \\ + 87 \\ \hline \end{array}$$

$$\begin{array}{r} 808 \\ + 89 \\ \hline \end{array}$$

$$\begin{array}{r} 4,219 \\ + 584 \\ \hline \end{array}$$

$$\begin{array}{r} 12,625 \\ + 8,396 \\ \hline \end{array}$$

$$\begin{array}{r} 2,708 \\ + 4,109 \\ \hline \end{array}$$

$$\begin{array}{r} 76,509 \\ + 32,761 \\ \hline \end{array}$$

$$\begin{array}{r} 409 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 301 \\ - 89 \\ \hline \end{array}$$

$$\begin{array}{r} 972 \\ - 376 \\ \hline \end{array}$$

$$\begin{array}{r} 670 \\ - 408 \\ \hline \end{array}$$

$$\begin{array}{r} 404 \\ - 96 \\ \hline \end{array}$$

$$\begin{array}{r} 7,020 \\ - 3,455 \\ \hline \end{array}$$

$$\begin{array}{r} 23,909 \\ - 7,622 \\ \hline \end{array}$$

$$\begin{array}{r} 13,040 \\ - 4,653 \\ \hline \end{array}$$

$$\begin{array}{r} 2,907 \\ - 2,477 \\ \hline \end{array}$$

Computation Practice II

Show all work.

$$\begin{array}{r} 56 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 97 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 296 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1,203 \\ \times 6 \\ \hline \end{array}$$

$$400 \times 3 = \underline{\hspace{2cm}} \quad 600 \times 6 = \underline{\hspace{2cm}} \quad 700 \times 8 = \underline{\hspace{2cm}}$$

$$7,000 \times 6 = \underline{\hspace{2cm}} \quad 5,000 \times 8 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 49 \\ \times 89 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ \times 87 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 79 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 291 \\ \times 72 \\ \hline \end{array}$$

$$\begin{array}{r} 1,253 \\ \times 46 \\ \hline \end{array}$$

$$\overline{7)44}$$

$$\overline{4)50}$$

$$\overline{6)79}$$

$$\overline{3)97}$$

$$\overline{6)534}$$

$$\overline{5)205}$$

$$\overline{9)369}$$

$$\overline{8)280}$$

