

Eastmont Math Challenge

Week of 5/18-5/22

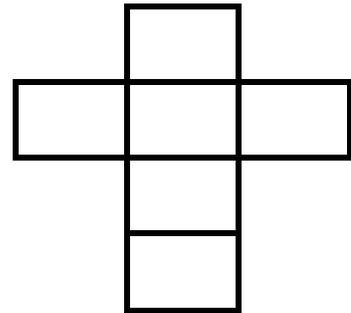
This handout is for all Eastmont Intermediate students. Each week a handout similar to this one will be available to students. As you work through the problems, work independently but feel free to use online resources if you need help (khan academy or google). This handout is one component of your math activities. The other component is Freckle math. You are encouraged to progress through the Freckle activities as well. Check your google classroom daily for possible updates from your teachers. **Answer keys for handouts will be available the following week.*

Crosses Puzzle

- 1) Write the numbers 0.3, 0.4, 0.5, 0.6, 0.7 and 0.8 in the correct places so that each line of the cross adds up to 1.8

0.3 0.4 0.5 0.6 0.7 0.8

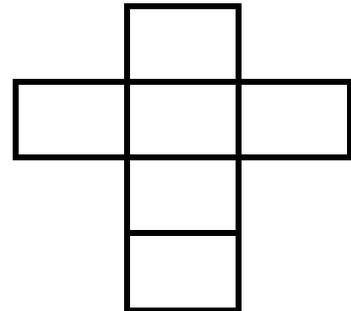
When added the **4 numbers from top to bottom** must **equal 1.8** and the **3 numbers from left to right** must **equal 1.8**



- 2) Write the numbers 0.3, 0.4, 0.5, 0.6, 0.7 and 0.8 in the correct places so that each line of the cross adds up to 2

0.3 0.4 0.5 0.6 0.7 0.8

When added the **4 numbers from top to bottom** must **equal 2** and the **3 numbers from left to right** must **equal 2**



Object of the game: Make the number 24 from the four numbers shown. You can add, subtract, multiply and divide. *Use all four numbers on the card, but use each number only once. You do not have to use all four operations.



Challenge: How many different ways can you make 24 with these four numbers?

Try for at least 2 :)

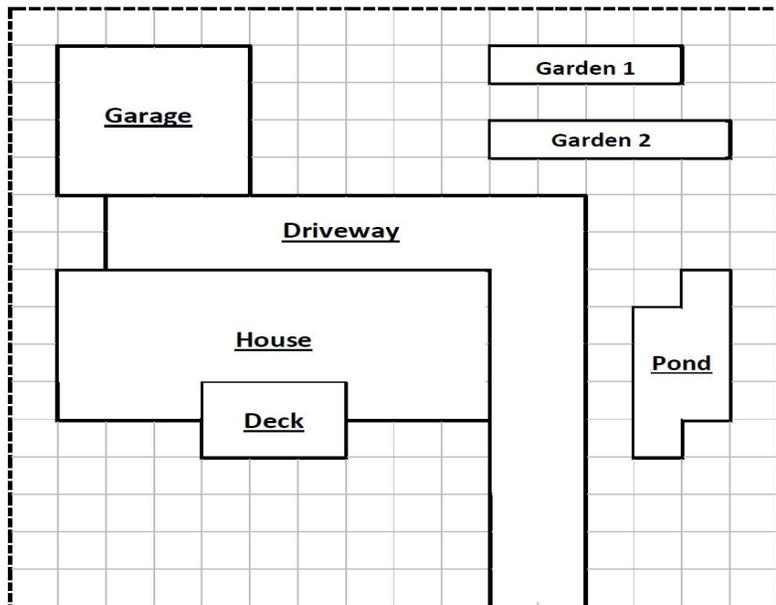
1st way - =24
2nd way - =24
More ? =24

Area & Perimeter

Yenny's New Place

Yenny received these plans of a property she has just bought. Help her answer some questions.

(Each square is 1 square meter.)



- 1) What is the area of the house(not including deck)? m²
- 2) What is the area of the pond? m²
- 3) What is the total area of the gardens? m²
- 4) What is the area of the driveway? m²
- 5) Yenny wants to make her garage larger. She needs one that is 22m². How much larger does she need to make the new garage? m²
- 6) Yenny wants room to plant

vegetables. Design a garden space with a total area of 11m². Yenny is not sure if she would like one large garden, or a couple of smaller ones. Give possible dimensions for one large or two small spaces that have a total area of 11m². dimensions(length and width)_____

Solve the following problems



7) $9 + (7777) - 2074 = \underline{\quad}$

8) $4 + 11 \times 10 + 11 - 6 = \underline{\quad}$

9) For 5,700,501,821,422,271, write the digit that is in the **hundred thousands** place

10) Rewrite $\frac{4}{25}$ as a decimal

11) $| -6 | + x = 2$ $x = \underline{\quad}$

12) $9m - 20.6 = 19$ $m = \underline{\quad}$

Unit Rates

Find each unit rate. Round to the nearest hundredth if necessary.

13) 18 people in 3 vans / 1 van

14) \$156 for 3 books / 1 book

15) 115 miles in 2 hours / 1 hour

16) 8 hits in 22 games / 1 game

17) 65 miles in 2.7 gallons / 1 gal

18) 2,500 Calories in 24 hours / 1 hour

Choose the lower unit price (which is the better buy?)

20) \$12.95 for 3 pounds of nuts or \$21.45 for 5 pounds of nuts

 is the better buy

21) A 32-ounce bottle of apple juice for \$2.50 or a 48-ounce bottle for \$3.84.

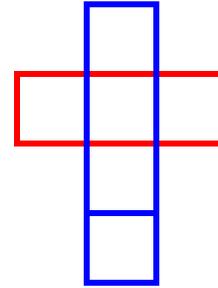
 is the better buy

“Helpful Hints”

Crosses Puzzle

If you are having trouble try Guess and Check! Place the numbers in the boxes, add them up and see how close you are.

You are adding from left to right (in red) and top to bottom (in blue) the square in the center is used twice!



Game 24:

Operations: types of math add +, subtract -, Multiply \times , divide \div

Try Guess and Check here too!

You have to use all four numbers: 4, 6, 2, 2.

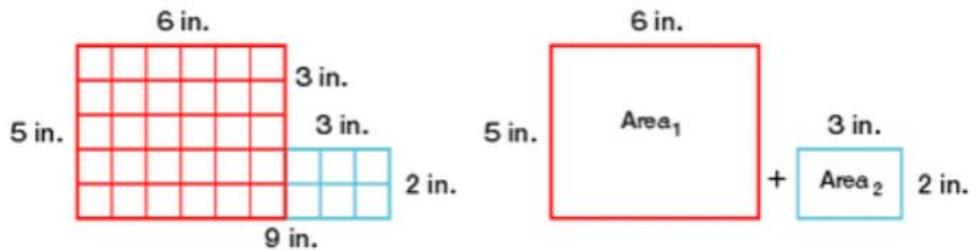
You can add, subtract, multiply, and divide, BUT you don't have to do them all!

Area and Perimeter

Here is a video about Area and Perimeter: https://www.youtube.com/watch?v=rSVMrPu0_U&t=2s

Area: The inside Length (times) width $A = L \times W$

If you have an odd shaped area you can break it down into smaller rectangles or just count the squares.



Perimeter: The outside

Add all 4 sides

length + length + width + width

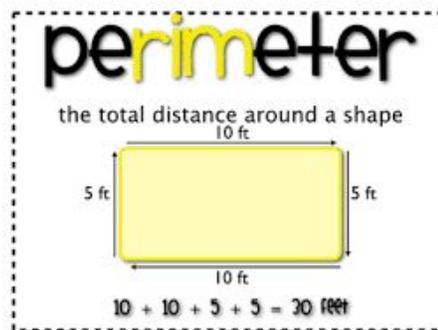
Or

$$P = 2 \times L + 2 \times W$$

Property: the land the house is on

Design: create your own

Dimensions: the length and width of our creation



Unit Rates here is a video about unit rates <https://www.youtube.com/watch?v=LbJUFuEqAlg&t=2s>

Rate: comparing two different things ex. Miles per Gallon

Unit Rate: the rate for one of something (divide)

ex. 50 miles in 2 hours $50 \div 2 = 25$ so, 25 miles per hour

Unit Cost: the price for 1 ex. Cost divided by how many you are buying