

Sunday, April 30th

Burima Family Census (2017)*



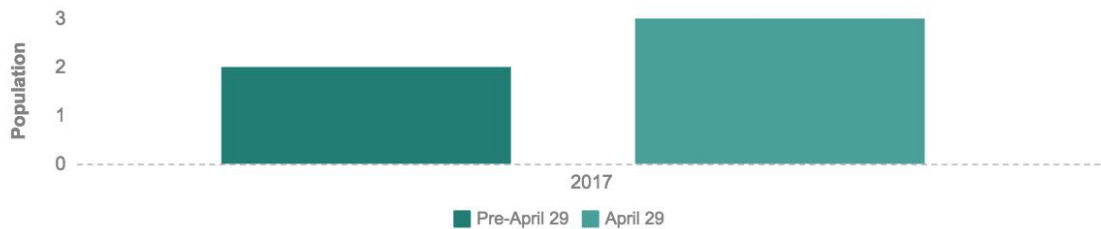
*Margin of error is plus or minus 2.5 people, 19 times out of 20

Addition of Margaret (Maggie) Elise Burima Increases Population by 33% Analysts Skeptical That Trend Will Continue

On April 29, 2017, the Burima household grew by one human. Margaret (Maggie) Elise Burima was viewed as a welcome addition to the household by all residents. When asked for her thoughts, resident Kelly Moffet-Burima commented, "I can't believe that happened." What Margaret currently lacks in present income earnings, she makes up for ten-fold in cuteness and her ability to inspire sheer awe in those near her.



Burima Household Population



Born 4:40 AM, Saturday



Female



Family Seems To Like Her



We really like her



6 lbs, 10 ounces

Daily Math Practice

What is $75\,422 + 867$?

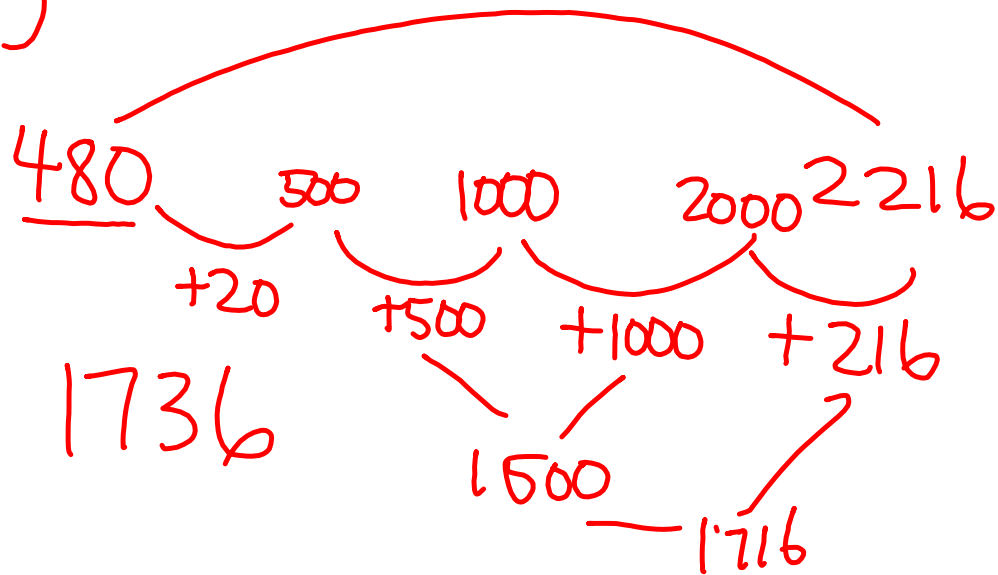
$$\begin{array}{r} 75\,422 \\ \,867 \\ \hline 76\,289 \end{array}$$

difference

Daily Math Practice

What is $2216 - 480$?

adding



$$\begin{array}{r} \overset{|}{2} \overset{||}{2} \overset{||}{1} \overset{||}{6} \\ - \quad 480 \\ \hline 1736 \end{array}$$

Daily Math Practice

What is $5.85 + 6.29$?

Daily Math Practice

What is $7.92 - 4.31$?

$$[732 - 491]$$

article writing

Headline - The summary of the main idea in the article. This grabs the readers attention and makes the reader interested in the rest of the article.

Byline - Where the name of the reporter or news service is found.

Dateline - Tells us when the story was written.

Lead Paragraph - Tells us the most important facts of the story using the 5 W's [who, what, where, when, why] and How. This information pulls the reader deeper into the story.

Less Important Facts - Gives us more facts using greater detail about the 5 W's and How.

Least Important Facts - Where even more information is found about the 5 W's and How. These added details and facts are what fill up the article but are not critical to understanding the main idea.

Newspaper Article Breakdown

headline

byline

dateline

lead paragraph

less important details

least important details



Types of Polygons

Regular or Irregular

A **regular** polygon has all angles equal and all sides equal, otherwise it is **irregular**



Regular

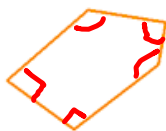
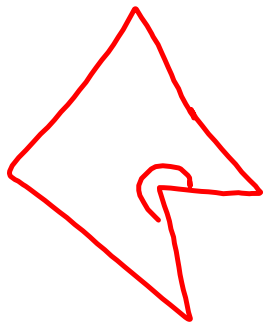


Irregular

Concave or Convex

A **convex** polygon has no angles pointing inwards. More precisely, no internal angle can be more than 180° .

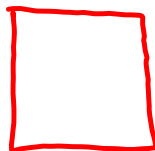
If any internal angle is greater than 180° then the polygon is **concave**. (*Think: concave has a "cave" in it*)



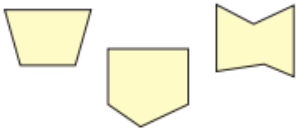
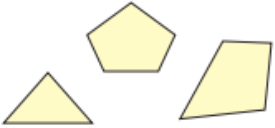
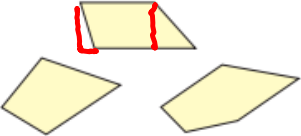
Convex



Concave



Find the mystery attribute.
Show how you checked your answer.

All of these have it.	None of these has it.	Which of these has it?
		

● _____

What is Air?

Air has mass
Air takes up space

Air can be compressed
inhale O_2
exhale CO_2

Hot air rises
Cold air sinks
Renewable source

Air has:
oxygen

73%	nitrogen
20%	oxygen
5%	CO_2
2%	other

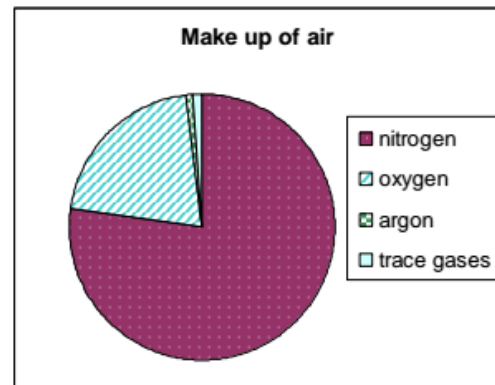
Air – the air we breathe is made of different gases



Gas	Percent in Air
Nitrogen	79 %
Oxygen	21 %
Argon	1 %
Other trace gases	Less than 1%

Air exists because:

- ♦ It takes up space
- ♦ It has volume
- ♦ It has weight
- ♦ Air has mass
- ♦ It has pressure



Air takes up space

- ◆ Run a garbage bag through the air- it fills with air = air takes up the space in the bag
- ◆ Put a cup upside down in water. The cup will not fill with water because air is taking the space up in the cup. You must let the air out (by tipping the cup) in order for water to fill up the space.

Air has volume

- ◆ You can measure the volume of air in a room- take the measurements of the room (length X width X height). This will equal the volume of air in the room.

Air has weight

- ◆ tie two equal size balloons on the ends of a stick. Balance them. Pop one balloon. The other balloon filled with air will fall towards the ground because it has weight.

Air has mass

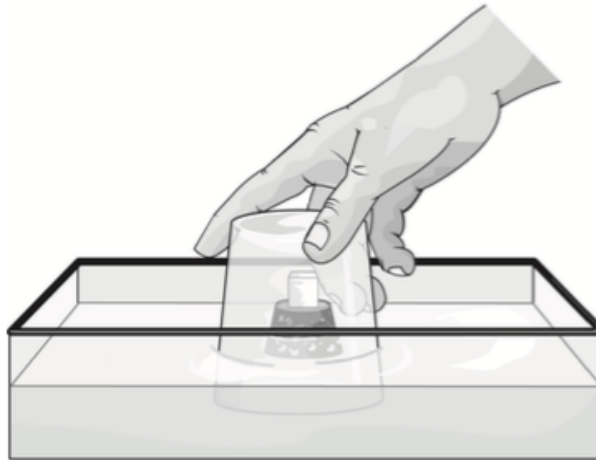
- ◆ measure a balloon that is not blown up on a scale. Record its mass. Blow up the balloon with air. Remeasure the balloon on the scale. The difference is the mass of the air

Air has pressure

- ◆ air pressure increases the closer you are to sea level
- ◆ air pressure decreases as you go up a mountain.

Use the following information to answer question 3.

A sugar cube is balanced on a piece of cork floating in a small fish tank. An empty glass is inverted and placed over the cork and sugar cube. The glass is then pushed down to the bottom of the tank.



3. When the glass reaches the bottom of the tank, the sugar cube will **most likely**
- A. stay dry, because the air in the glass will expand
 - B. stay dry, because the air in the glass will take up space
 - C. get wet, because the water will exert less pressure than the air
 - D. get wet, because the water will exert more pressure than the air



The Four Forces of Flight



The Four Forces of Flight Keep This Plane Aloft
The marvels of air travel.

12.09.03

Have you ever thrown a Frisbee®? It flies because of four forces. These same four forces help an airplane fly. The four forces are lift, thrust, drag, and weight. As a Frisbee flies through the air, lift holds it up. You gave the Frisbee thrust with your arm. Drag from the air made the Frisbee slow down. Its weight brings the Frisbee back to Earth again.

You see them everyday: airplanes, jets, and helicopters, soaring, zooming, and even roaring through the skies. We may take flight for granted; yet, knowing the science behind it gives us a better understanding of the

Wings keep an airplane up in the air, but the four forces are what make this happen. They push a plane up, down, forward, or slow it down.

- Thrust is a force that moves an aircraft in the direction of the motion. It is created with a propeller, jet engine, or rocket. Air is pulled in and then pushed out in an opposite direction. One example is a household fan.
- Drag is the force that acts opposite to the direction of motion. It tends to slow an object. Drag is caused by friction and differences in air pressure. An example is putting your hand out of a moving car window and feeling it pull back.
- Weight is the force caused by gravity.
- Lift is the force that holds an airplane in the air. The wings create most of the lift used by airplanes.

The way the four forces act on the airplane make the plane do different things. Each force has an opposite force that works against it. Lift works opposite of weight. Thrust works opposite of drag. When the forces are balanced, a plane flies in a level direction. The plane goes up if the forces of lift and thrust are more than gravity and drag. If gravity and drag are bigger than lift and thrust, the plane goes down. Just as drag holds something back as a response to wind flow, lift pushes something up. The air pressure is higher on the bottom side of a wing, so it is pushed upward.

Daniel Bernoulli



Copy

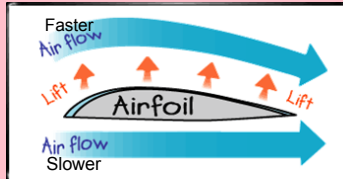
Bernoulli's Principle - Faster moving air creates lower pressure than slower moving air which creates higher pressure.

Fast Moving Air = Low Pressure
Slow Moving Air = High Pressure

Higher pressure causes LIFT!!!!

Airfoil is a shape which is most commonly seen in airplane wing designs.

Copy



Faster moving air creates LOW PRESSURE - top of the wing

Slower moving air creates HIGH PRESSURE - bottom of the wing

Since the air flowing over the top of the wing has a further distance to travel, it has to move quicker to keep up with the air moving underneath the wing (which has a shorter distance to travel).

This is why a plane can fly. The high pressure under the wing pushes the plane up, and since there isn't as much pressure on the top of the wing, the plane elevates into the sky.

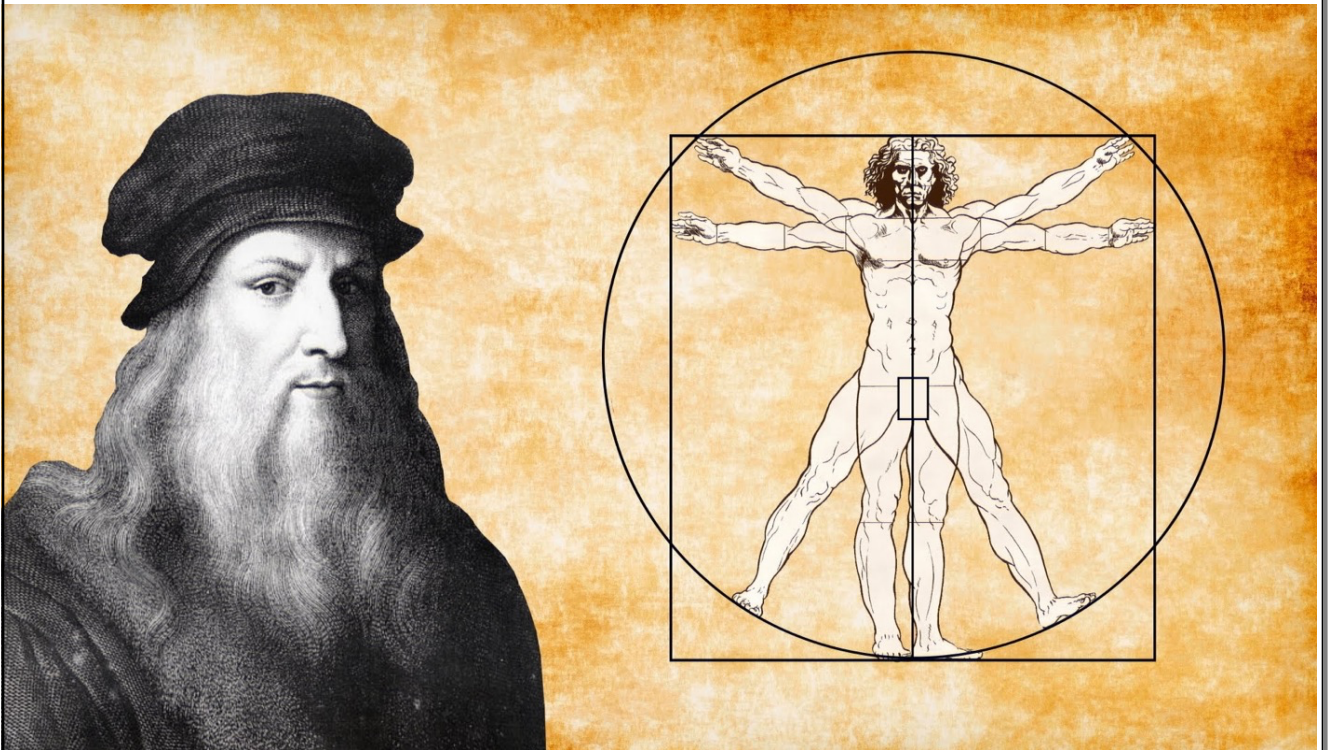
Number Assessment on Monday May 8th, 2017

- operations including Order of Operations
- place value
- prime and composite numbers
- arrays, multiples and factors
- mixed and improper fractions, ordering fractions
- ratio, percent, integers

Donald in Mathmagicland

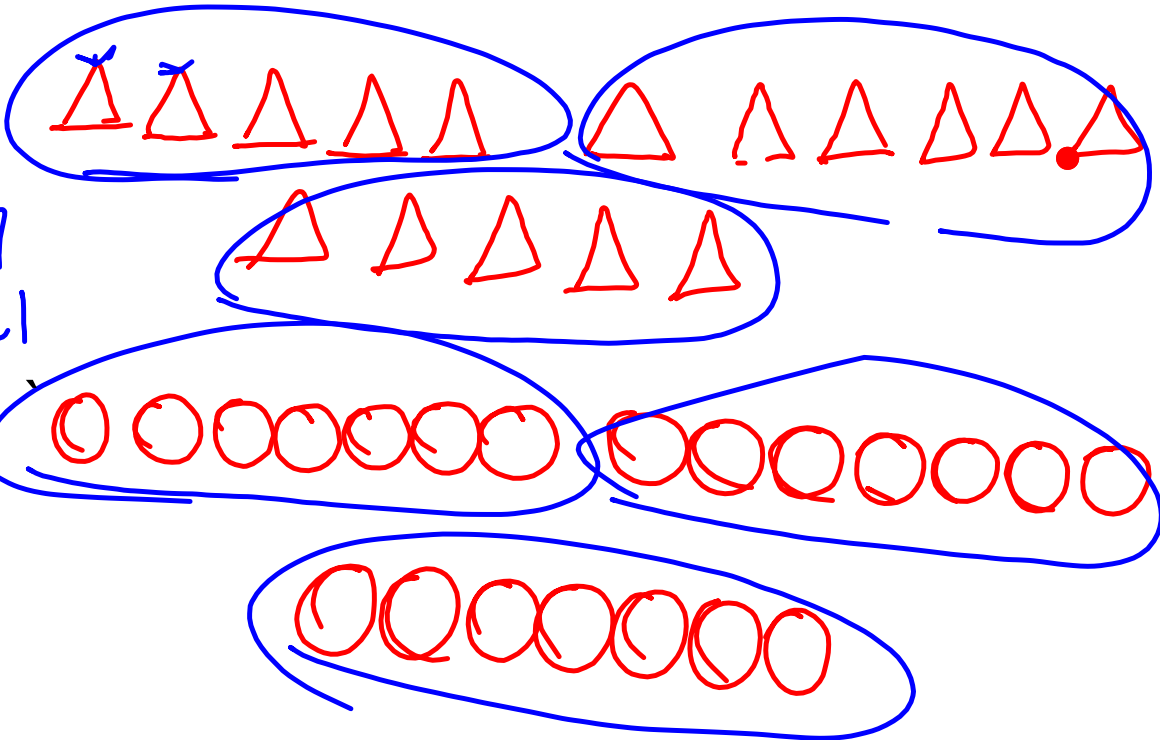
[https://www.youtube.com/
watch?v=D5n6iT2Aqrl](https://www.youtube.com/watch?v=D5n6iT2Aqrl)

Ratio



Ratio

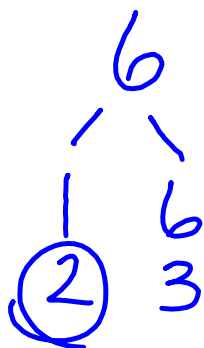
5:7
15:21



Simplest Form

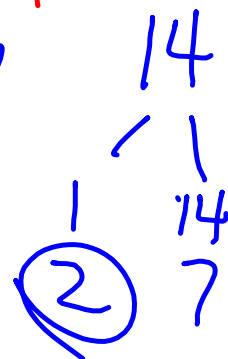
$$\frac{8 \div 2}{36 \div 2} = \frac{4 \div 2}{18 \div 2} = \frac{2}{9}$$

$$\frac{12 \div 3}{36 \div 3} = \frac{4 \div 3}{12 \div 3} = \frac{1}{3}$$



$$\frac{9 \div 3}{18 \div 3} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$$

$$\frac{6 \div 2}{14 \div 2} = \frac{3}{7}$$



Percentages: What is a
percent?

Partner Talk

[https://www.youtube.com/
watch?v=QFrqTFRy-LU](https://www.youtube.com/watch?v=QFrqTFRy-LU)

out of 100


$$\frac{\text{hundredths } 27}{100} = 27\% = \begin{array}{c|c|c} \text{ones} & \text{tenths} & \text{hundredths} \\ \hline 0 & 2 & 7 \\ \hline 1 & 0 & \end{array}$$
$$\frac{27}{50}$$



ONLINE ETYMOLOGY DICTIONARY

Search:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

percent 

1560s, *per cent*, from Modern Latin *per centum* "by the hundred" (see *per* and see *hundred*). Until early 20c. often treated as an abbreviation and punctuated accordingly.

cent = 100

Building the Ideal Community

With your group members, build your ideal community. However, you are only allowed to use as many services as you can afford. There are some things you NEED to provide and there are some things you can buy as a 'want' if you have any blocks left.

	<u>NEEDS</u>	<u>WANTS</u>
<u>GROUP</u>	School: 5 blocks Police/ firefighting services: 3 blocks Hospital: 5 blocks Garbage/ recycling: 2 blocks Roads: 2 blocks	Movie Theatre: 4 blocks Bouncy castle: 3 blocks Candy store: 2 blocks
<u>INDIVIDUAL</u>	Food/Water: 1 block Housing: 1 block	Nice car: 2 blocks Pool: 5 blocks

INCOME (How much you have to spend)
Red - 25 blocks Orange - 20 blocks Purple - 15 blocks Yellow - 10 blocks Blue - 5 block