
HALLOWEEN MATH PROJECT
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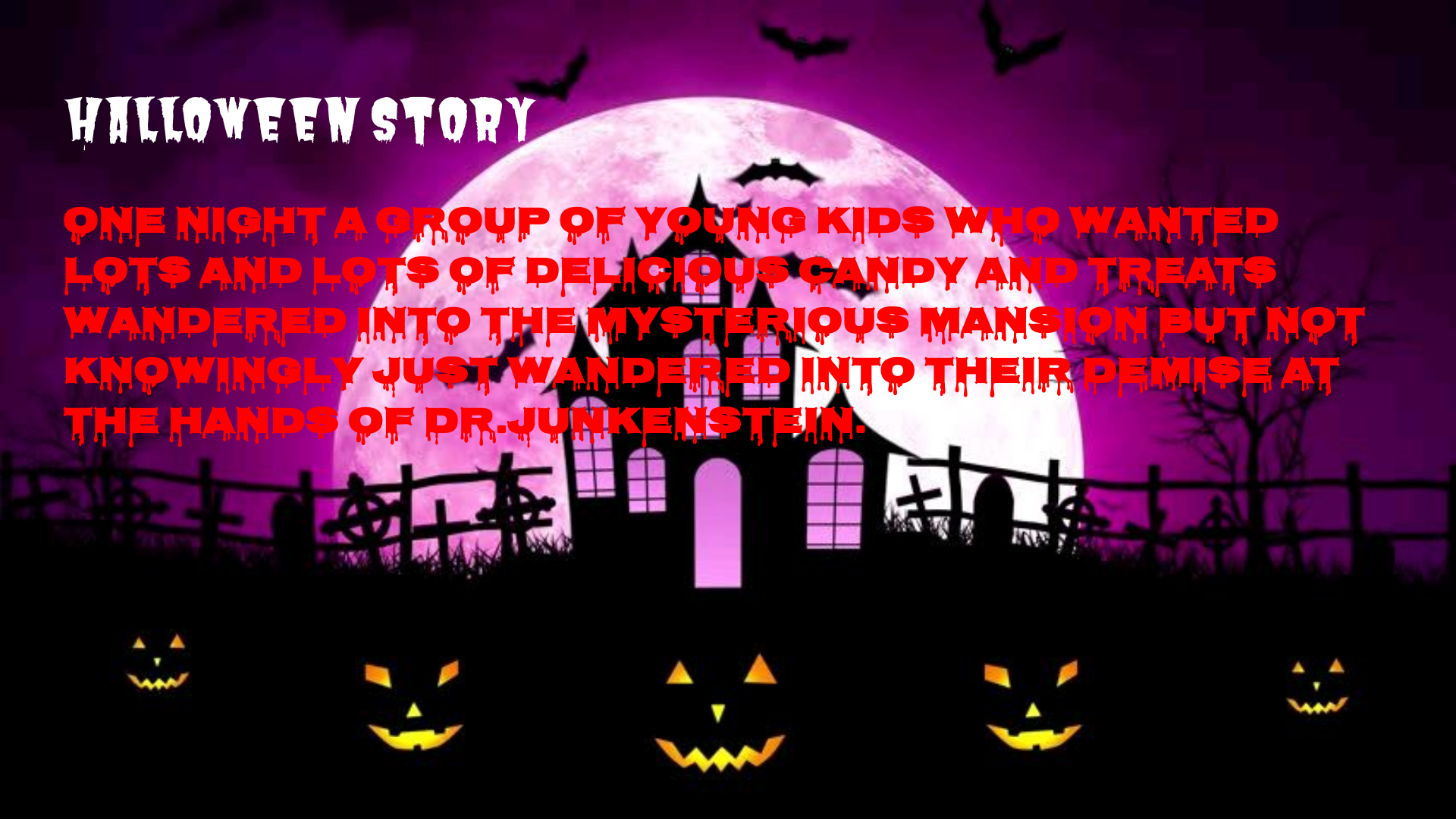
HALLOWEEN STORY

ONE NIGHT A GROUP OF YOUNG KIDS WHO WANTED LOTS AND LOTS OF DELICIOUS CANDY AND TREATS WANDERED INTO THE MYSTERIOUS MANSION BUT NOT KNOWINGLY JUST WANDERED INTO THEIR DEMISE AT THE HANDS OF DR.JUNKENSTEIN.



EYE THE ORANGE PUMPKINS

AS THEY WALKED STRAIGHT INTO THE HOUSE, THEY FELL STRAIGHT INTO A HOLE. LUCKY THEY LANDED RIGHT ON TOP OF A BUNCH OF PUMPKINS CUSHIONING THEIR FALL. AS THEY ALL GOT UP THEY WERE FACED WITH A SIGN AND A DOOR. THE SIGN SAYING "THERE ARE POSTERS ALL AROUND YOU, ONE OF THESE POSTERS HAS THE KEY TO OPENING THE DOOR, THE ONLY PROBLEM IS THAT THERE IS 5 POSTER IN FRONT OF YOU, YOU MUST FIND THE AREA OF THE CORRECT POSTER. THE LENGTH OF THE CORRECT POSTER IS 12 CM, WHILE THE LENGTH IS 10 CM. WHAT IS THE AREA OF THE CORRECT POSTER?

SOLUTION

A=LW

A=10(12)

$A=120\ CM^2$ THE CORRECT POSTER HAS THE AREA OF 120 CM SQUARED ^{2}

EYE THE ORANGE PUMPKINS

AS YOU FIND THE POSTER WHICH YOU THOUGHT HAD THE KEY, INSTEAD HAD A BOX, WITH A KEYPAD ATTACHED TO IT. WITH IT, IT HAD A SIGN ATTACH SAYING, “THE CODE TO THIS KEY PAD IS THE AREA REMAINING IN RECTANGLE FACING YOU. THE DIMENSIONS TO IT IS 15 CM WHILE THE SIDE IS 10. TO FIND THE AREA OF THE REMAINING PART, YOU MUST FIND THE AREA OF THE SECOND RECTANGLE WHICH HAS THE DIMENSIONS OF 3 AND 6.” WHAT IS THE AREA OF THE FIRST RECTANGLE? WHAT AREA IS THE SECOND RECTANGLE? WHAT IS THE REMAINING AREA OF THE LEFTOVER RECTANGLE (THE KEYPAD CODE) ?

EYE THE ORANGE PUMPKINS SOLUTION

FIRST RECTANGLE:

A=LXW

A=15X10

$A=150CM^2$

SECOND RECTANGLE:

A=LXW

A=3X6

$A=18CM^2$

THE REMAINING AREA

A=R1-R2

A=150-18

$A=132CM^2$

THE KEYPAD NUMBER IS 132

The Rectangular Scare

As they opened the door, they found out that they made it into another room. This time, they were shown with 3-D shapes on a table,a strange hole shaped in a square,and a sign saying, "There are shapes on top of the table, each shape has a different type of volume. You must find the volume of each shape, in order to know what rectangular prism could fit perfectly inside the hole. The length of all the 3 shapes are 4 cm. The first shape has a width is 6, the second shape has a width of 7 and the last shape has a width of 8 . The height of the correct shape is 6 cm and the volume of it is 144. What is the correct shape

THE RECTANGULAR SCARE SOLUTION

CALCULATION: THE WAY TO SOLVE THIS QUESTION IS TO DO TRIAL AND ERROR.

V=LXWXH
=4X6X6
=144

V=LXWXH
=4X5X6
=120

V=LXWXH
=4X8X6
=192

THE FIRST SHAPE WITH A WIDTH OF 6CM IS THE CORRECT SHAPE TO FIT IN THE HOLE THROUGH THE DOOR TO LET THE GROUP ESCAPE MERE DEATH!

THE LADDER FALL

AS THEY FINISHED THE PROBLEM, A LADDER FELL DOWN FROM THE SKY. ON THE LADDER IT HAD A SIGN, IT SAID "THIS LADDER WILL HELP YOU GET OUT, BUT WITH A CATCH. YOU MUST KNOW HOW LONG THE HYPOTENUSE OF THE LADDER WILL BE AS ONCE YOU ENTERED THE MEASUREMENT YOU WON'T BE ABLE TO CHANGE HOW LONG THE LADDER IS. THERE IS A HINT, THE MEASUREMENT OF THE RIGHT ANGLE TRIANGLE BASE IS 15 M." AS YOU LOOK AROUND YOU NOTICED THAT THE HOLE ABOVE YOU WAS RIGHT BESIDE A WALL, THAT WALL WAS 10 M TALL AND YOUR BASE IS IN THE LETTER YOU HAVE. YOU NEED TO FIND OUT HOW LONG THE HYPOTENUSE IS?

THE LADDER FALL SOLUTION

SOLUTION:

THE BASE= 15M

LENGTH = 10M

HYPOTENUSE = ??

$A^2+B^2=C^2$

$10^2+15^2=C^2$

$100+225=C^2$

$325=C^2$

$\sqrt{325}=\sqrt{C^2}$

$18.02M=C$

THE HYPOTENUSE OF THE LADDER IS 18.02M

The Candy Trouble

As you make it out of the basement, you find Dr.Junkenstein looking at a scatter plot. After talking to Dr. Junkenstein you find out that he is really trying to find the rate of change of the graph.The points are (5,25) , (15, 75) , (30, 150) and (60, 300). He also ask about how much candy he must have for 150 people. what is the rate of change of the graph, and is the graph linear

The Candy Trouble Solution

Solution for What is the Rate Of Change?

$M=(y_2-y_1)/(x_2-x_1)$

$M= (75-25)/(15-5)$

$M= 50/10$

$M=5$

How much candy he must give to 150 people?

$y=mx-b$

$75=5(15)- b$

$75 - 75 = b$

$0=b$

$y=mx-b$

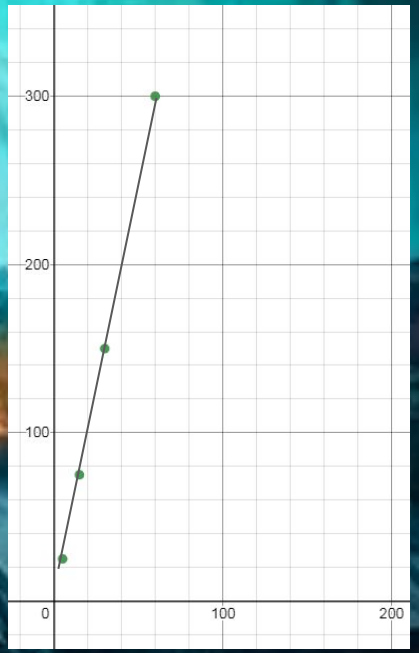
$y=5(150) - 0$

$y=5(150)$

$y = 750$

Is the Graph Linear?

Yes, the graph is linear.



THANKS FOR LISTENING!!!!!!

https://www.youtube.com/watch?v=w5F_gfaX2B4