



MATH ENRICHMENT PROGRAM
PROBLEM SOLVING

Day 1

WELCOME TO OUR 1ST MEETING.

- We will meet weekly and have fun looking at different mathematical situations !!
- No homework !!!
- We only ask that you honestly engage in the lesson, participate, verbalize your thoughts, and join the discussions.
- Every meeting we will have 5 quick *MC Check-in* Questions and 5 quick *MC Check-out* Questions.

These are NOT tests or quizzes but a way for us to measure the learning process. Just be honest and do your very best.

CHECK IN

1) what is the value of $F(2)$

A) 15

B) 25

C) 55

D) 6

x	F(x)
1	15
6	65
2	25
5	55

CHECK IN

2) If $F(x) = 55$ what is the value of x

- A) 5
- B) 0
- C) 55
- D) 6

x	$F(x)$
1	15
6	65
2	25
5	55

CHECK IN

3) Simplify the expression $X + 2X - 5 + 12 + 3X$

A) $3X - 17$

B) $3X + 7$

C) $6X + 7$

D) $6X + 7$

CHECK IN

4) $f(x) = \frac{x-3}{2}$, what is $f(11)$

A) 8

B) 2

C) 4

D) 7

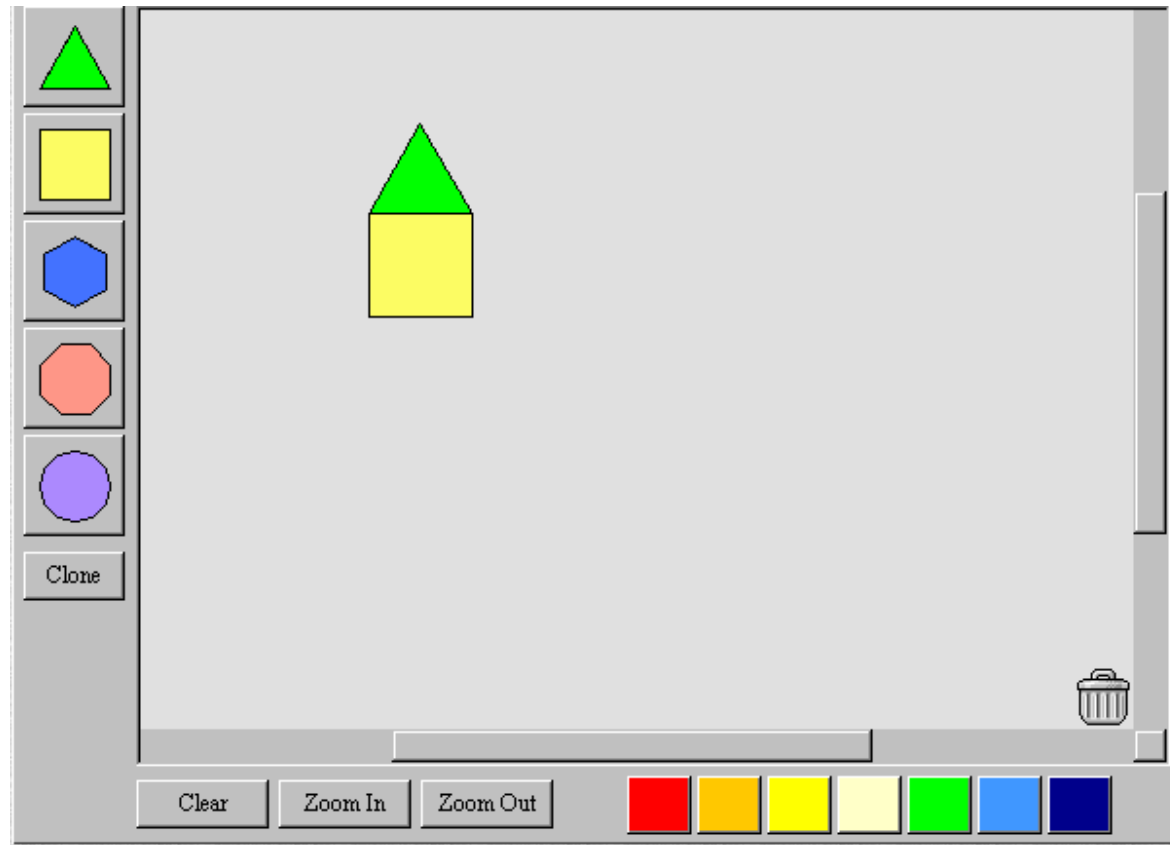
CHECK IN

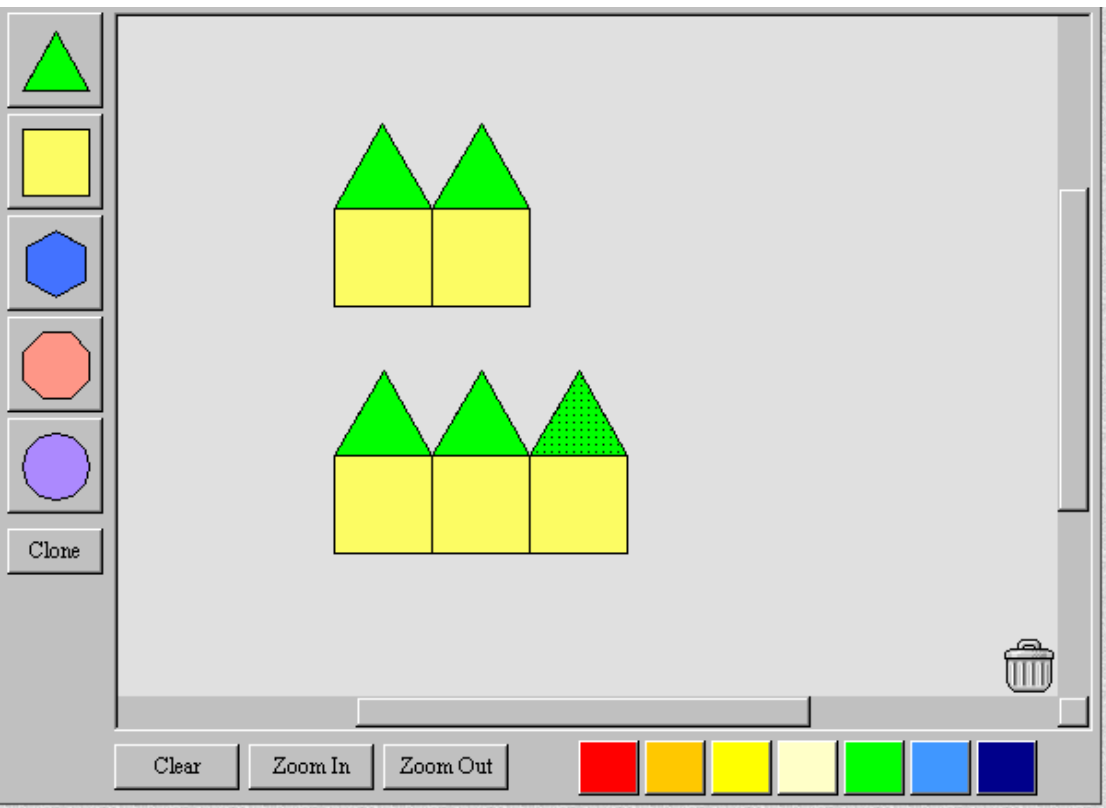
5) Fill in the blank,

160, 80, 40, 20, 10, _____

MAIN ACTIVITY- INTRODUCTION

http://nlvm.usu.edu/en/nav/frames_asid_163_g_4_t_3.html?open=activities&from=topic_t_3.html





LET'S FILL THE TABLE

Shape #	Triangular tiles	Square tiles	Total # of Tiles
1	1	1	2
2	2	2	4
3	3	3	6
10			
52			
100			
n			

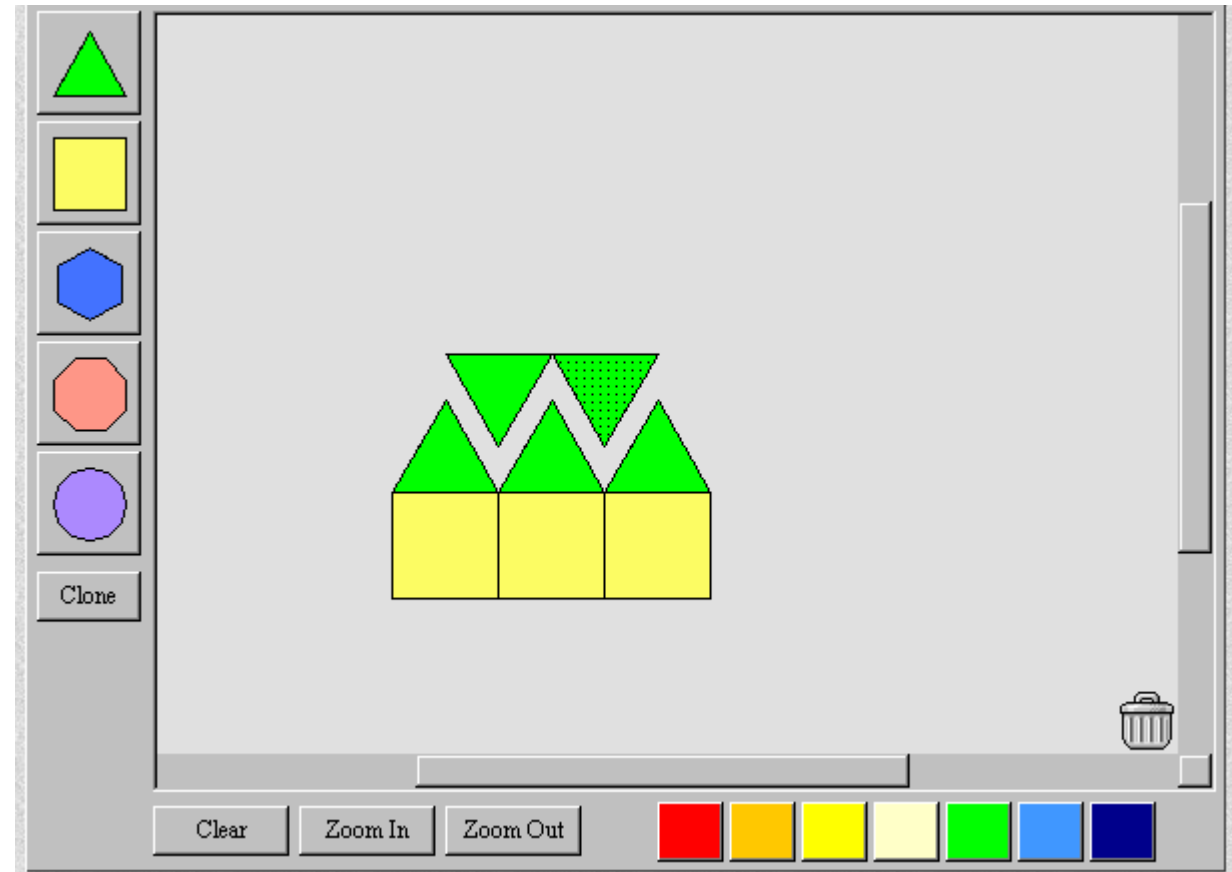
-How are you getting these numbers so fast? How do you know?
 -so if we had a shape #n , can we predict its total number of tiles?
 Coming up with a generalization

CLOSE THE ROOF- HOW MANY TOTAL TILES ARE NEEDED FOR SHAPE # 35

How can we organize our information?

Let's make a table

n	Triangular tiles	Square tiles	Total
1			
2			
3			
4			
5			
6			
7			



HOW MANY TOTAL TILES ARE NEEDED FOR SHAPE # N

- Do you see any patterns in the table? Share
- Can we predict for $n = 100$? , verbalize the rule you are using –
- Generalize the rule.

SUMMARY

Please write on the board

Write words you feel can represent some of what you did in this session?