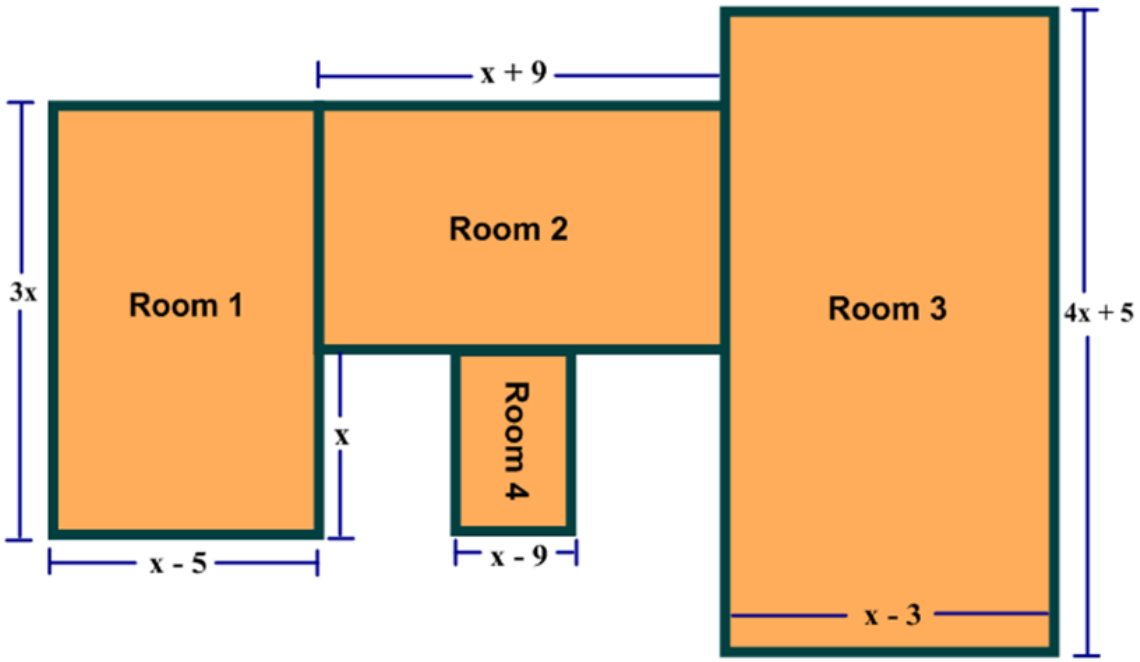
Name: _____ **Math 8** **Period:** _____

Polynomial Floor Plan Project



Project Details: You are building a house. You will need to determine the proper measurements to use for each room based on the above floor plan. You will also need to apply the appropriate operation (add, subtract or multiply).

1. Perform the appropriate operations using the polynomial dimensions to determine a simplified formula for the area of each room (1, 2, 3 and 4). Be sure to state the operation used.
2. Perform the appropriate operations using the polynomial dimensions to determine a simplified formula for the area of the entire house. Be sure to state the operation used.
3. Perform the appropriate operations to determine a simplified formula for the area of the entire house <u>if Room 1 is removed.</u> Be sure to state the operation used.
4. Determine the area of each room and the entire house when x = 15 feet.
5. Determine the area of the entire house if Room 2 is removed at x = 15 feet.

YOU MUST SHOW YOUR WORK TO RECEIVE FULL CREDIT!

Please refer to the Rubric provided to be sure of the project expectations.

Due on or BEFORE Tuesday, May 21

Polynomial Floor Plan Project (2)

Room 1 (Operation used _____)

	Width	Length	Formula (show operation applied)	Area (simplified polynomial)

Work (Room 1):

Room 2 (Operation used _____)

	Width	Length	Formula (show operation applied)	Area (simplified polynomial)

Work (Room 2):

Room 3 (Operation used _____)

	Width	Length	Formula (show operation applied)	Area (simplified polynomial)

Work (Room 3):

Room 4 (Operation used _____)

	Width	Length	Formula (show operation applied)	Area (simplified polynomial)

Work (Room 4):

Entire House (Operation used _____)

Room 1	Room 2	Room 3	Room 4	Entire House

Work:

Entire House with Room 1 Removed (Operation used _____)

Room 1	Room 2	Room 3	Room 4	Entire House with Room 1 Removed

Work:

Calculate the square footage of the entire house when x = 15 feet.

Square Footage of Entire House (x = 15 ft)

Work:

Calculate the square footage of the entire house with Room 2 removed when x = 15 feet.

Square Footage of Entire House with Room 2 removed (x = 15 ft)

Work:

Name: _____ Math 8 Period: _____

RUBRIC FOR POLYNOMIAL FLOOR PLAN PROJECT

Correct measurements used for each room.	**Up to 10 points _____**
Correct operation applied for each	**Up to 10 points _____**
Room 1 accurately simplified	**Up to 10 points _____**
Room 2 accurately simplified	**Up to 10 points _____**
Room 3 accurately simplified	**Up to 10 points _____**
Room 4 accurately simplified	**Up to 10 points _____**
Entire House accurately simplified	**Up to 10 points _____**
Entire House with Room 1 removed accurately simplified	**Up to 10 points _____**
Entire House Square Footage accurately calculated	**Up to 10 points _____**
Entire House Square Footage with Room 2 removed accurately calculated.	**Up to 10 points _____**

DUE on or BEFORE May 21. Lateness (-5 per school day) **_____**

TOTAL POINTS FOR POLYNOMIAL FLOOR PLAN PROJECT: **_____**