

Name _____

Dum-Dums and Your Hand

Goal: Use hand span to predict the number of Dum-Dums a person can pick up.

Data Collection and Summary

1. What does the explanatory (predictor) variable x represent? and what does the response variable y represent?

$x =$ _____

$y =$ _____

2. Each person should measure his/her hand span according to the rules the class agreed upon. Record your pair of data below. Be sure to include units on the hand span. Record your data on the table provided on the board.

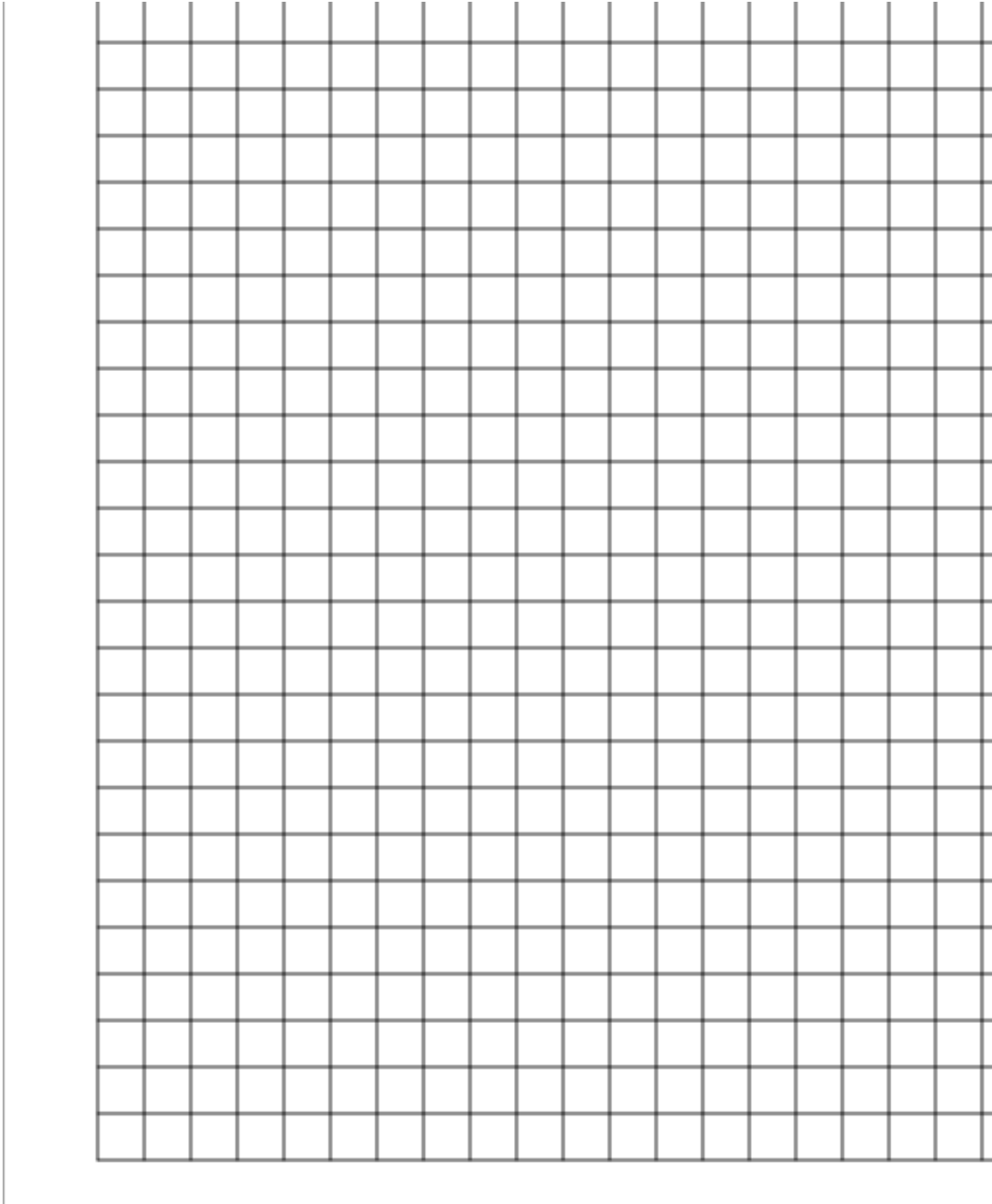
Hand span= _____ # of Dum-Dums= _____

3. Collect the data from the entire class and record it in the table below:

Student	Hand Span	# of Dum-Dums
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Student	Hand Span	# of Dum-Dums
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

4. On the graph paper below, create a scatter plot of the class data. Be sure to scale and label each axis.



5. Draw a line of best fit through the data. Lay a straight edge so that it follows the trend of the data. Center the edge so that it goes approximately through the center of the data points, and then draw a line of the best fit.

Analysis:

6. Interpret what the slope means in the context of this problem.

Predictions:

8. Use the graph to make the following predictions.
 - a. Predict the number of Dum-Dums a person with the hand span of 19.7 cm ($7\frac{3}{4}$ inches). _____
 - b. Predict the number of Dum-Dums Ms. Long can hold in her hand.

 - c. Predict the number of Dum-Dums picked up by someone with a hand span of 22 cm (just over $8\frac{1}{2}$ inches). _____

Averages:

9. Find the average hand span in the class. _____ This is the average of x or \bar{x} .
10. Find the average number of Dum-Dums held by the class. _____
This is the average of y or \bar{y} .
11. Plot the ordered pair (x, y) on your graph. Does it lie on or near the line of best fit? _____