

Ages of Famous Personalities

Algebra 1 Level

Name _____



Supplies: Graphing Calculator, PowerPoint presentation

Task: You will be seeing photographs of twenty famous people. As you see the photos, record the names of each individual and your best estimate as to the person's age. If you do not know the person, take your best guess as to the age from observing the photo. Actual ages will be the age at the end of the current year.

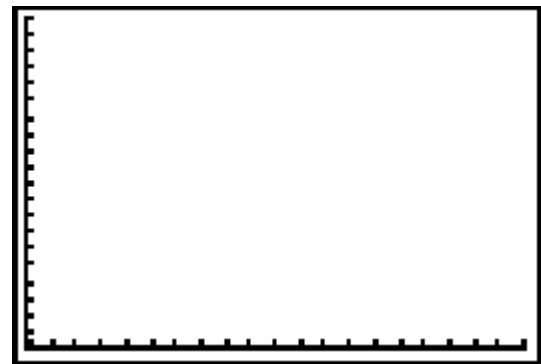
Famous Personality	Estimated Age	Actual Age
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

1. Using your graphing calculator, prepare a scatter plot using the estimated age on the x -axis and the actual age on the y -axis. Sketch the scatter plot on the grid at the right. Be sure to label your axes and scale.

2. Choosing two points, find the equation of the line of best fit (model equation) for your data.

3. Using your graphing calculator, find the linear regression equation, the calculator's line of best fit, for your data.

4. What is an appropriate domain for graphing age data in general? _____



5. If you had guessed all of the ages correctly, what would be the equation of the line representing these correct guesses? _____
6. Based upon your scatter plot, did you, in general, overestimate or underestimate the ages? _____ Explain how you made this decision by examining the scatter plot.

5. a. What percent of your estimated ages were correct? _____
b. What percent of your estimated ages were above the actual ages? _____
7. *Interpolate:* If you guessed that a person's age was 33, what would the exact age be based upon the calculator's model equation? _____
8. *Interpolate:* If a person's actual age was 54, what would have been the estimated age based upon the calculator's model equation? _____
9. *Extrapolate:* If a person's estimated age was 87, what would have been the actual age based upon the calculator's model equation? _____
10. a. What is your age? _____
b. Based upon the calculator's model equation, what would have been your estimated age?

11. a. Which personality had the greatest difference between the estimated age and the actual age?

- b. What is the AVERAGE of the differences between the actual ages and the estimated ages for all of the personalities? _____