

Bike Weights and Jump Heights

NAME _____

1. In BMX dirt-bike racing, jumping high or "getting air" depends on many factors: the rider's skill, the angle of the jump, and the weight of the bike. Here are data about the maximum height for various bike weights.

WEIGHT (pounds)	HEIGHT (inches)
19	10.35
19.5	10.3
20	10.25
20.5	10.2
21	10.1
22	9.85
22.5	9.8
23	9.79
23.5	9.7
24	9.6

Use grid paper to plot the data (weight, height). If the data are linear, draw a trend or best-fit line.

2. Is there a positive, negative, or no relationship between bike weight and jump height? Explain your answer.
3. As the weight increases, the height _____.
4. Find the slope or rate of change. What does this mean in words?
5. Predict the maximum height for a bike that weighs 21.5 pounds if all other factors are held constant.