

Probability and School Evidence

A young person was seen leaving the high school parking lot after skulking near a car with a broken window. An iPhone was taken from the car. The suspect was identified as having brown hair and wearing a white shirt, jeans, and dark shoes. In a school of 2214 students, how common are these characteristics?

Write your answers on a sheet of paper. Show all data collected and all math. Include labels!

1. What percentage of students in your class are wearing white shirts?
2. If your class is representative of the whole school, estimate how many students in the school are likely to be wearing a white shirt.
3. Is this good evidence?
4. What percentage of students in your class are wearing jeans?
5. If your class is representative of the whole school, estimate how many students in the school are likely to be wearing jeans.
6. Is this good evidence?
7. What percentage of students in your class are wearing both a white shirt and jeans?
8. Estimate how many students in the school are likely to be wearing a white shirt and jeans.
9. Determine the percentage of students in your class have brown hair and estimate how many students in the school have brown hair.
10. Determine the percentage of students in your class are wearing dark shoes and estimate how many students in the school might be wearing dark shoes.
11. Using your classmates as a sample population, how many students in the school might meet all of these descriptors?
12. Is this good evidence?