

Why is the class data better than your individual data?

Jeff measured the change in height of two plants to see how well they grew using two different fertilizers. These are his results:

Plant with Miracle-Gro: 6 cm

Plant with Schultz: 12 cm

These are the results from all of the students (4) in his group:

Plants with Miracle-Gro: 6 cm, 15 cm, 12 cm, 0 cm **Average=** _____

Plants with Schultz: 12 cm, 6 cm, 8 cm, 0 cm **Average=** _____

These are the results from all of the students (25) in the class:

Plants with Miracle-Gro: 6 cm, 15 cm, 12 cm, 0 cm, 14 cm, 15 cm, 17 cm, 12 cm, 13 cm, 18 cm, 11 cm, 14 cm, 12 cm, 15 cm, 19 cm, 10 cm, 13 cm, 16 cm, 17 cm, 14 cm, 16 cm, 17 cm, 22 cm, 13 cm, 15 cm

Average= _____

Plants with Schultz: 12 cm, 6 cm, 8 cm, 0 cm, 5 cm, 9 cm, 7 cm, 6 cm, 11 cm, 5 cm, 8 cm, 6 cm, 7 cm, 8 cm, 6 cm, 6 cm, 5 cm, 9 cm, 4 cm, 8 cm, 7 cm, 8 cm, 15 cm, 5 cm, 7 cm

Average= _____

Do Jeff's results match the class averages? _____

Do the results of Jeff's group match the class average? _____

What is a problem with using only Jeff's data to determine the results of the experiment?

What is a problem with using only Jeff's group data to determine the results of the experiment?

Why does using the class data give better results for the experiment?

Is there any data that seems like it could be considered “bad data?” Identify what data it is (the measurement and what type of fertilizer it was from), and explain why you think it is “bad data.”
