



FIRST LEGO LEAGUE - Ontario

| Record | |
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| Questions | |
| Question 1 Math | What was the error trend as the marker lines got farther from the wall? Explain this trend. |
| The farther the marker lines were from the wall, the more off they were from the theoretical value. This is because the errors added together (though sometimes cancelled out). | |
| Question 2 Math | On your graph, one of the axis was discrete and the other was continuous, which is which? Do you think most charts end up this way? |
| The x axis (marker lines) is discrete, and the y axis (distance) is continuous. Most charts are like this, because you want to show the measured value going up on the Y axis. | |
| Question 3 Coding | Sensors are often used to make sure everything going ok in an assembly line. Can you think of an example in an assembly line were a robot may want to get desecrate data from a continuous stream of information? |
| Counting parts/pieces, or weather a note a part is present. | |
| Question 4 Math | Circle all/any of the discrete numbers. 23.456 cm 5 dogs 11 km/h 30.5 °C |
| 5 dogs | |
| Question 3 Math | If you were passing under a bridge that was exactly 675 cm tall and in your owner’s manual, it tells you your truck is 673 cm plus or minus 5 cm (based on tire pressure), would you be 100% confident you could clear it safely. |
| No because it might be off one way or the other, possible as tall as 678 cm which is too high. | |