|  |  |
| --- | --- |
| NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_NAME2: \_\_\_\_\_\_\_\_\_\_\_\_\_ | **Stats** |
| Outdoor Lab –Groups of 2 | **DATE: Friday, May 19, 2017** |

Warmup:

In football, a Deering kicker has a 75%chance of making an extra point kick. In a game if he kicks 3 of them:

|  |  |
| --- | --- |
| P(makes none) | P(makes all of them) |
| P(exactly one) | P(exactly 2) |
| ADVANCED: If he takes 4 kicks,  Find P(makes exactly 2 of them) | |

Groups of 2: You are going to collect data outside.

In all these observations: You want to be very discrete. “The best way to change a behavior is to observe it”.

**Choose a topic, discussed and write it below.**

Now we are going outside and record your data here. In each box, put three measurements.

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| --- | --- | --- | --- | --- | --- |
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**Compile your results below:**

**What percent of the time \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?**

Create a 95% confidence interval for the true percent?

Theoretical:

If we look at 3 cars in row, find the probability:

|  |  |
| --- | --- |
| P(0 with your variable): | P(all 3 with your variable): |
| P(exactly one with your variable): | P(exactly 2 with your variable): |

Experimental: Of the 36 groups of 3 cars, find:

|  |  |
| --- | --- |
| P(0 with your variable): | P(all 3 with your variable): |
| P(exactly one with your variable): | P(exactly 2 with your variable): |

**one of the topics researched yesterday.**

Male Drivers(Male was 62%)

Big car (Big was 42.7%)

Wearing Seatbelts (93.8% wore them)

On Phones (11% on phone)

First fill out this table:

If we look at 3 cars in row, find the probability:

|  |  |
| --- | --- |
| P(0 with your variable): | P(all 3 with your variable): |
| P(exactly one with your variable): | P(exactly 2 with your variable): |