**Practice Graphing and Identifying Independent and Dependent Variables**

A safety inspector wants to see if there is a relationship between car speed and the distance a car travels after the driver steps on the brakes**. Identify the Independent and Dependent variables and graph the data using your Graphing Rules.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Speed (Kmph) | Distance traveled (m) |  |  |  |  |
| 10 | 12 |  |  |  |  |
| 20 | 16 |  |  |  |  |
| 30 | 31 |  |  |  |  |
| 40 | 37 |  |  |  |  |
| 50 | 40 |  |  |  |  |
| 60 | 45 |  |  |  |  |
|  |  |  |  |  |  |

**Identify the Independent and Dependent variables in the following examples:**

1. A scientist wants to see if the brightness of light has any effect on the number of moths attracted to the light.
2. A student wants to know which spray keeps his cell phone cleaner.
3. Susie studies which type of cough drop stops coughing quickest.
4. A musician studies the effect of different lullabies on how fast babies fall asleep
5. A doctor is interested in studying how stress affects the heart rates of humans
6. A mechanic wants to know if an electric motor turns faster if you increase the voltage
7. A bicycle company wants to know which bicycle fenders keep the rider drier in the rain.
8. Samantha wants to know which hair product will make her hair grow faster.
9. Susie conducts an experiment to determine if the length of a bird’s wing effects how fast it can fly.
10. Marvin wants to know if the height of a candle effects how fast it burns.