**Linear Relations Lesson #7**

How can we find the **initial value** and the **rate of change** from a **sentence**, from a **table**, and from a **graph** in order to come up with an **equation**?

**Sentences:**

It costs $0.75 per banana.

Initial Value: \_\_\_\_\_\_ Rate of Change: \_\_\_\_\_\_\_\_\_ Equation: \_\_\_\_\_\_\_\_\_\_

Zaina has a starting balance of $300 and she withdraws $25 each day.

Initial Value: \_\_\_\_\_\_ Rate of Change: \_\_\_\_\_\_\_\_\_ Equation: \_\_\_\_\_\_\_\_\_\_

Initial Value:

\_\_\_\_\_\_\_\_\_\_\_\_

Rate of Ch:

Equation:

Initial Value:

\_\_\_\_\_\_\_\_\_\_\_\_

Rate of Ch:

Equation:

\_\_\_\_\_\_\_\_\_\_\_\_

**Tables:**

|  |  |
| --- | --- |
| Number of Minutes Walking  m | Distance from Home in meters  D |
| 1 | 1000 |
| 2 | 800 |
| 3 | 600 |
| 4 | 400 |

|  |  |
| --- | --- |
| Number of Kilometers  k | Cost of Taxi ($)  C |
| 0 | 6.00 |
| 5 | 9.00 |
| 10 | 12.00 |
| 15 | 15.00 |

**Graphs: REMEMBER:** To find the **rate of change** use the formula

**Rate of Change = rise/run**

Initial Value:

\_\_\_\_\_\_\_\_\_\_\_\_

Rate of Ch:

Equation:



Initial Value:

\_\_\_\_\_\_\_\_\_\_\_\_

Rate of Ch:

Equation:

Initial Value:

\_\_\_\_\_\_\_\_\_\_\_\_

Rate of Ch:

Equation:

\_\_\_\_\_\_\_\_\_\_\_\_

