**2.5 – Using Linear Models**

**Scatter Plot** – graph used to determine if a relationship exists between paired data

**Positive Correlation**—y increases as x increases

**Negative Correlation**—y decreases as x increases

**Relatively No Correlation**—no linear pattern

**Perfectly Straight**-Correlation is 1 or -1

**Best Fitting Lines**

1. Draw Scatter Plot
2. Sketch line that appears to follow the pattern (equal dots above and below)
3. Choose two points on the line and estimate coordinates (don’t have to be original)
4. Find an equation of that line (*trend line*)

Find the slope:

Use point slope:

Ex: 1

Age: 16 16 18 18 25 20 28 30 40 60

Speed Drive: 45 48 52 49 42 45 40 38 30 22

*(another example on page 94 example #2)*

***HMWK: pg 96 #1-7, 9, 13, 15-17***