Name the type of correlation you would expect from each pair of variables below. Justify your answer in a complete sentence. Also, if applicable, identify the independent and dependent variable.

Example. The number of hours a candle has been burning & The height of the candle
Type of Correlation  Negative  Justification  As the number of hours a candle has been burning increases, the height of the candle decreases.
Independent Variable  Dependent Variable

1. Speed of Car & Distance traveled to complete stop after brakes are applied
Type of Correlation  Justification
Independent Variable  Dependent Variable

2. The number of students present in class & The number of empty chairs
Type of Correlation  Justification
Independent Variable  Dependent Variable

3. Age (up to 12 years old) & Height
Type of Correlation  Justification
Independent Variable  Dependent Variable

4. Circumference of your Head & Your I.Q.
Type of Correlation  Justification
Independent Variable  Dependent Variable
5. **Child’s reading level between Pre-K thru 6\(^{th}\) grade & Their shoe size**

Type of Correlation_________________________ Justification__________________________

________________________________________________________________________

Independent Variable_____________________ Dependent Variable____________________

6. **The distance a student lives from school & The time it takes them to get to school**

Type of Correlation_________________________ Justification__________________________

________________________________________________________________________

Independent Variable_____________________ Dependent Variable____________________

7. **The distance between the water level and top of tub & The time the water has been running**

Type of Correlation_________________________ Justification__________________________

________________________________________________________________________

Independent Variable_____________________ Dependent Variable____________________