

1.1 Modeling & Equation Solving

Review Target: Connecting Numeric, Algebraic, and Graphical Models

Review of Prior Concepts

Which of the following equations represents the linear relationship between time, t , and velocity, v , shown in the table below?

t	0	1	2
v	120	152	184

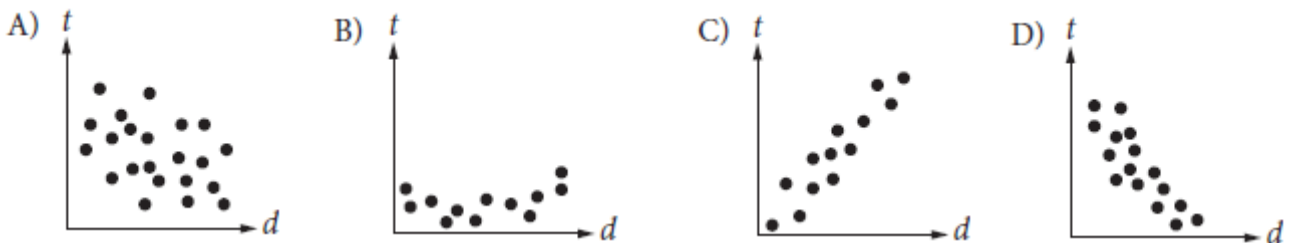
- A. $v = 32t$ B. $v = 32t + 120$ C. $v = 120t$ D. $v = 120t + 32$ E. $v = 120t + 120$

SAT Connection**Problem Solving and Data Analysis**

4. Given a scatterplot, use linear, quadratic, or exponential models to describe how the variables are related.

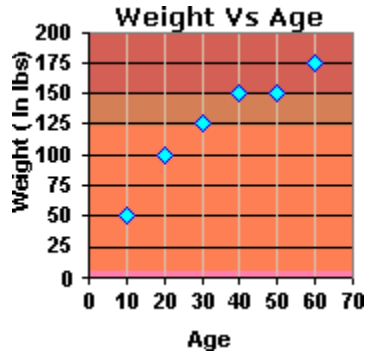
Example:

Which of the following graphs best shows a strong negative association between d and t ?



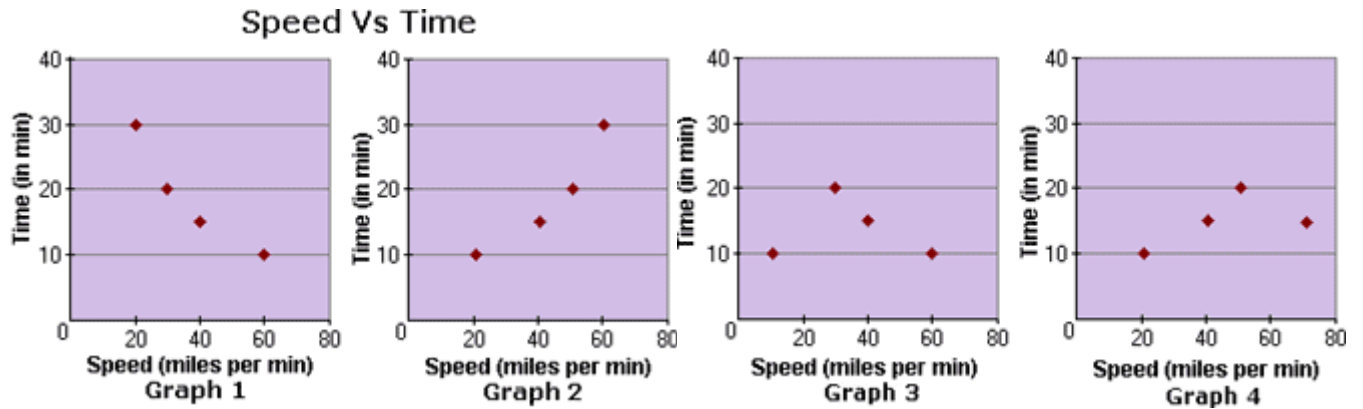
Graphical Models and Trends

Example 1: What sort of trend is shown in the scatter plot?



- A. No trend B. Negative trend C. Constant trend D. Positive trend

Example 2: Which scatter plot shows the negative relationship between the times taken to reach City A from City B at different speeds?



- A. Graph 3 B. Graph 1 C. Graph 4 D. Graph 2