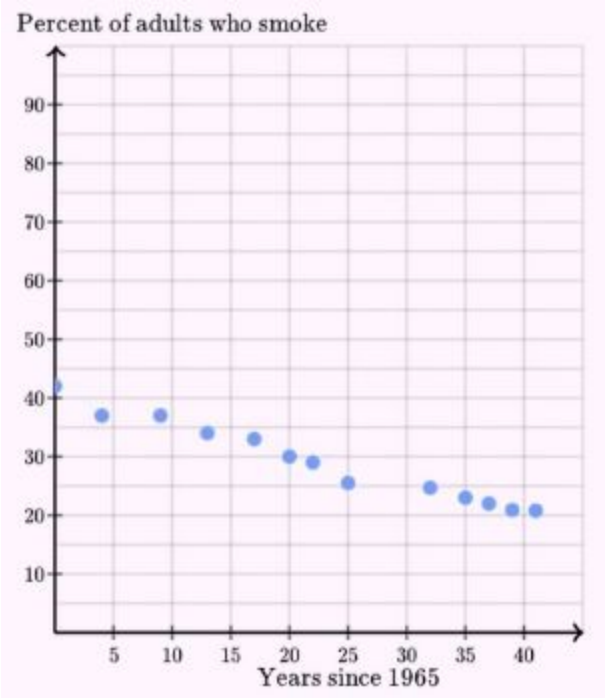
Lesson 10.3: Patterns in Data

Targets

1. I can interpret data involving two variables.

Smoking in 1945

First attempt this problem on your own. Then watch the video and copy his notes.



The graph at the right shows the percentage of American adults who smoke over time.

- *Assuming the trend shown in the data has been consistent since 1945, use the graph to estimate the percentage of American adults who smoked in 1945.*

- *What is the slope of the line?*

Khan Activity: <u>Estimating Slope of Line of Best Fit</u>

Complete this activity on Khan. Use the space below to do the problems on paper.

Flip this page over for the rest of the lesson...

Interpreting Two-Way Tables Practice

Practice 1

First attempt these problems on your own. Then watch the video and copy my notes.

A 2014 study analyzed what percentage of residents in California were born in-state and what percentage were born out of state from 1900 until 2012. The two-way table of *column* relative frequencies below shows the results of the study. California's total population was approximately 31 million in 2012.

	California 1930	California 2012
Born in California	0.35	0.55
Born in a U.S. state other than California	0.46	0.17
Foreign born	0.19	0.28
Column Total	1.00	1.00

Approximately how many 2012 California residents were born in California ?

○ 5 million ○ 11 million ○ 17 million ○ Not enough information

Practice 2

The following two-way table of *row* relative frequencies shows data on taking vitamin C supplements and contracting a cold for a group of 280 French skiers.

	Cold	No Cold	Row total
No Vitamin C	0.22	0.78	1.00
Vitamin C	0.15	0.85	1.00

How many French skiers that were given Vitamin C contracted colds?

○ 42 ○ 140 ○ 62 ○ Not enough information

Khan Activity: Interpreting Two-Way Tables

Complete this activity on Khan. Use the space below to do the problems on paper.

Exit Ticket

1. Have all your notes filled out above.
2. Complete the following Khan Academy Activities:
    a. Estimating Slope of Line of Best Fit
    b. Interpreting Two-Way Tables