## PROBABILITY TOPICS: PRACTICE 2; BASIC PROBABILITY

## **Student learning Outcomes:**

- Students will define basic probability terms.
- Students will practice calculating probabilities.
- Students will differentiate between independent and mutually exclusive events.

## GIVEN:

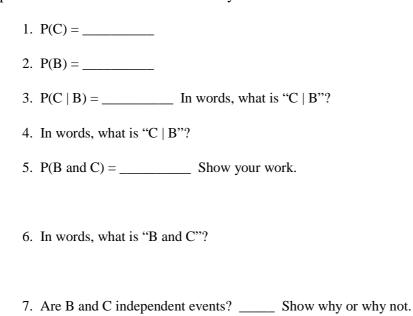
68% of Californians support the death penalty. A majority of all racial groups in California support the death penalty, except for black Californians, of whom 45% support the death penalty (source: San Jose Mercury News, 12/2005). 6% of all Californians are black (source: U.S. Census Bureau).

## ANALYZE THE DATA:

Use probability rules to solve the problems below. Show your work. In this problem, let:

C= Californians that support the death penalty B= black Californians

Suppose that one Californian is randomly selected.



Q	P(B or C)	_	Show	vour	work
ο.	I (D OI C)		SHOW	your	WUIK.

- 9. In words, what is "B or C"?
- 10. Are B and C mutually exclusive events? \_\_\_\_\_ Show why or why not.