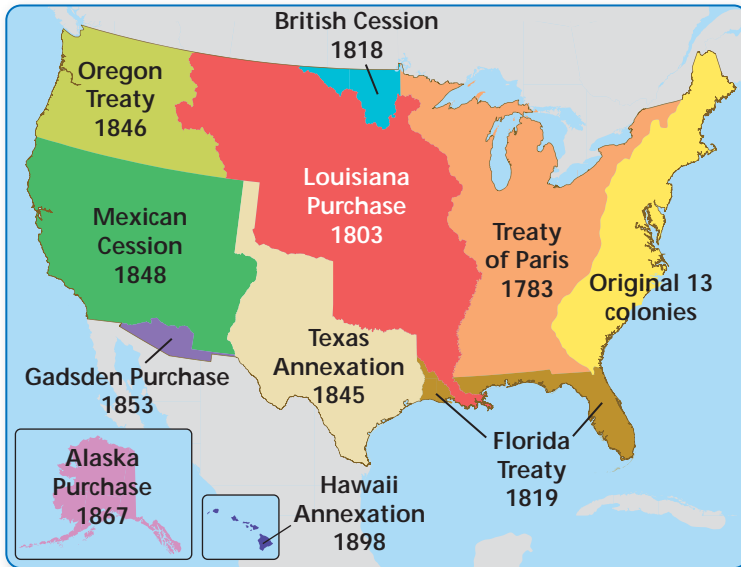


EXAMPLE 6 Negating a Statement Involving *Or*

Use a set diagram to visualize the negation of the statement. Then, describe how the original statement can be false.



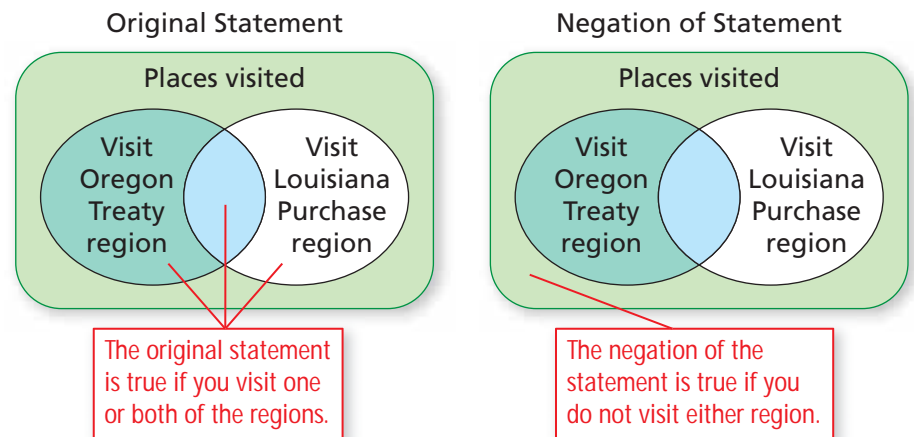
This summer I will visit the region acquired by the Oregon Treaty or the Louisiana Purchase.

The United States purchased or annexed its land (outside the original 13 colonies) in 10 stages.

- 1783: Treaty of Paris
- 1803: Louisiana Purchase
- 1818: British Cession
- 1819: Florida Treaty
- 1845: Texas Annexation
- 1846: Oregon Treaty
- 1848: Mexican Cession
- 1853: Gadsden Purchase
- 1867: Alaska Purchase
- 1898: Hawaii Annexation

SOLUTION

Start by drawing a set diagram. Identify the regions represented by the original statement. Then identify all the regions other than those represented by the original statement.



Notice that the original statement is still true if you visit both regions.

✓ Checkpoint

Help at Math.andYOU.com

Use a set diagram to visualize the negation of the statement. Then describe how the original statement can be false.

I am going to write about the Mexican Cession, the Gadsden Purchase, or the Texas Annexation for my term paper in American History.