

Determining Truth Values

Determine the truth value of each proposition. After each proposition, write T if the proposition is truth, or F if the proposition is false.

1. Today is Friday and the next president of the United States will be a women. **F**
2. There are 10 people in this room. **F**
3. It is not the case that $4 = 3$. **T**
4. At least one student in the CHAMP program is in 12th grade or Houston is the 4th largest city in the United States. **T**
5. All students in the CHAMP program are the same age. **F**
6. There are 50 stars on the United States flag and there are no stars on the state flag of Texas. **F**
7. There are 50 stars on the United States flag or there are no stars on the state flag of Texas. **T**
8. There are 24 hours in a day and 12 months in a year. **T**
9. There are 24 hours in a day or 12 months in a year. **T**
10. Africa is a country and $6 - 2 = 4$. **F**
11. Africa is a country or $6 - 2 = 4$. **T**
12. The iPhone 5 was released before the iPhone 4 or $7 * 3 = 22$. **F**
13. The iPhone 5 was released before the iPhone 4 and $7 * 3 = 22$. **F**
14. Today is Thursday or today is not Thursday. **T**
15. Today is Thursday and today is not Thursday. **F**