Evaluating Compound Conditionals

Determine if the following statements evaluate to **true** or **false**. Assume in every case that the two variables **age** and **day** have been initialized with the values shown.

> **var age = 16;**

> **var day = "Monday";**

1. (day == "Mon") || (day == "Monday")   **(true)**   **(false)**

2. (day == "Tues") || (day == "Tuesday")   **(true)**   **(false)**

3. (day == "Tues") || (5 < 10)   **(true)**   **(false)**

4. (age > 10) && (age < 20)   **(true)**   **(false)**

5. !(age > 10)   **(true)**   **(false)**

6. (day == "Tuesday") || (age < 12)   **(true)**   **(false)**

7. !((age == 16) || (day == "Monday"))   **(true)**   **(false)**

8. !((age == 16) && !(day == "Monday"))   **(true)**   **(false)**

9. ((age == 16) && (day == "Monday")) && (day == "Tuesday")   **(true)**   **(false)**

10. ((age == 16) && (day == "Monday")) || (day == "Tuesday")   **(true)**   **(false)**

11. ((age > 10) && ((age + 5) > 20))   **(true)**   **(false)**

Teacher Instructions

Estimated Time: 30 - 45 minutes

Purpose: To introduce some programming syntax and promote logical thinking.

Instructions: Teach the students/have a lesson about conditional statements. A conditional statement is a statement that only runs under certain conditions. Also, give the students an introduction about what each symbol represents: ==, &&, ||, !, etc. Do a few examples with the students before assigning the worksheet. We have a powerpoint to help explain this concept.

Answers:
1. True
2. False
3. True
4. True
5. False
6. False
7. False
8. True
9. False
10. True
11. True