Boolean Expressions Worksheet

Evaluate the boolean expressions. Choose true, false or invalid.

Given the following variable declaration and initialization:

```
int x = 10;
int y = 15;
int z = 8;
```

1.   5 > 8 || 10 > 6

              ● True   False   Invalid

2.   x < y && z > 8   // values of x, y, and z are given above

              ● True   False   Invalid

3.   x < y || z > 8

              ● True   False   Invalid

4.   ! (x < 10)

              ● True   False   Invalid

5.   ! x < 10

              ● True   False   Invalid

6.   x < 8 || > 20

              ● True   False   Invalid

7.   !(x != 5)

              ● True   False   Invalid

8.   !x != 5

              ● True   False   Invalid

9.   y – 5 == 10

              ● True   False   Invalid

10.   y < 10 || x == y && z == 8   // remember that && is evaluated before ||

              ● True   False   Invalid

11. true || false

- True   False   Invalid

12. false || false && true

- True   False   Invalid

13. true || true || false

- True   False   Invalid

14. false && true || true

- True   False   Invalid

15. false || false

- True   False   Invalid

16. true && false

- True   False   Invalid

17. !true

- True   False   Invalid

18. !false

- True   False   Invalid

19. !true || false

- True   False   Invalid

20. (true || false) && true && false

- True   False   Invalid

21. true || (false && true) && false

- True   False   Invalid

22. (true || false) && !(true && false)

- True   False   Invalid