Homework 4 Solutions

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1. b  
2. d  
3. a  
4. b  
5. c  
6. d  
7. a  
8. b  
9. a  
10. d – the closest if statement not enclosed in a different block

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Errors:
1. semicolons after the three conditions  
2. uses assignment operator instead of equality operator  
3. missing curly braces around if and else blocks

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5. should be if (!(x > 20))

Algorithm Workbench:

1. if (y == 0) x = 100;
2. if (y == 10) x = 0;  
    else x = 1;

3. if (sales < 10000)  
    commission = .1  
    else if (sales < 15000)  
        commission = .15  
    else  
        commission = .2

4. if (minimum) hours = 10;

5. if (amount1 > 10)  
    if (amount2 < 100)  
        System.out.println(amount1 > amount2? amount1 : amount2;
6. if (grade >= 0 && grade <= 100)
    System.out.println("The number is valid:");

7. if (temperature >= -50 && temperature <= 150)
    System.out.println("The number is valid:");

8. if (hours < 50 || hours > 80)
    System.out.println("The number is valid:");

9. if (title1 < title2)
    System.out.println(title + "\n" + title2);
else
    System.out.println(title2 + "\n" + title1);