EF 101 - A&S Module 5-2 Practice Worksheet

a = 5,    b = [17 5],    c = [3 5 8 9],    d = [ 8 5]
        e = [12 7]    f = [8 9 5 4 0 2]
g = [2 4]
h = [12 14 8 11 6 12]
       20 9

1) Given the following Matlab statements

my_num = 2
if a >= b(2)
    my_num = 4
end

a) the result for my_num is ________

2) Given the following Matlab statements

my_num = 2
if a >= b(1)
    my_num = 4
end

a) the result for my_num is ________

3) Given the following Matlab statements

my_num = 8
for ii = 3:3:12
    if ii <= 9
        my_num = my_num - ii.*2
    end
end

a) the result for my_num is ________

4) Given the following Matlab statements

my_num = 8
for ii = 3:3:12
    if my_num > 0
        my_num = my_num - ii.*2
    end
end

a) the result for my_num is ________

5) Given the following Matlab statements

jj = 1
for ii = 1:2:3
    if f(jj,ii) > 6
        f(jj,ii) = a
    end
end

a) the result for f is ________

6) Given the following Matlab statements

jj = 1
for ii = 1:2:3
    if f(jj,ii) > 6
        f(jj,ii) = a
    elseif f(jj,ii) > 4
        f(jj,ii) = 1
    else
        f(jj,ii) = a - 2
    end
end

a) the result for f is ________

7) Given the following Matlab statements

jj = 1
for ii = 1:2:3
    if f(jj,ii) > 6
        f(jj,ii) = a
    elseif f(jj,ii) > 4
        f(jj,ii) = 1
    else
        f(jj,ii) = a - 2
    end
end

a) the result for f is ________
8) Given the following Matlab statements

```matlab
for jj = 1:1:3
    for ii = 1:1:2
        if ii .* jj == 1
            p(jj,ii) = 1
        elseif ii .* jj == 2
            p(jj,ii) = 2
        elseif ii .* jj == 3
            p(jj,ii) = 3
        elseif ii .* jj == 4
            p(jj,ii) = 4
        else
            p(jj,ii) = 0
        end
    end
end
```
c) the result for \( p \) is ____________________

9) Given the following Matlab statements

```matlab
my_num = 2
if a >= b(2) & a <= b(1)
    my_num = 4
end
```
a) the result for \( my_num \) is ______________

10) Given the following Matlab statements

```matlab
my_num = 2
if a >= b(2) | a <= b(1)
    my_num = 4
end
```
a) the result for \( my_num \) is ______________

11) Given the following Matlab statements

```matlab
my_num = 2
if a >= b(2) & a ~= b(1)
    my_num = 4
end
```
a) the result for \( my_num \) is ______________

12) Given the following Matlab statements

```matlab
my_num = 2
if a >= b(2) | a ~= b(1)
    my_num = 4
end
```
a) the result for \( my_num \) is ______________

13) Given the following Matlab statements

```matlab
my_num = 2
if a ~= b(2) & a ~= b(1)
    my_num = 4
```
a) the result for \( my_num \) is ______________

14) Given the following Matlab statements

```matlab
my_num = 2
if a ~= b(2) | a ~= b(1)
    my_num = 4
end
```
a) the result for \( my_num \) is ______________

15) Given the following Matlab statements

```matlab
for jj = 1:1:3
    for ii = 1:1:2
        if h(jj,ii) >= 12 | h(jj,ii) <= 8
            h(jj,ii) = 1
        elseif h(jj,ii) == 11
            h(jj,ii) = 2
        else
            h(jj,ii) = 0
        end
    end
end
```
a) the result for \( h \) is ____________________