LAB SHEET # 3

You need to show all work. Indicate the right answer in the answer sheet. Even if you mark the right answer, as long as you do not show work on this sheet, you will no be given credit for that question:

1) In the right triangle shown, the length of the side labeled H is

![Right triangle with sides 6 and 8]

a) 14
b) 100
c) 48
d) 28
e) None of the above

2) If $4x - 4 = y$ then $x$ equals:

a) $4y - 4$
b) $y + 4$
c) $\frac{y}{4} + 4$
d) $\frac{y + 4}{4}$
e) $\frac{y - 4}{4}$
3) From the bar graph below you can project the price of a hamburger in 2004 to be:

![Bar Graph]

a) 1.50  
b) 1.20  
c) 1.40  
d) 1.70  
e) None of the above

4) If 33% of a number is 33, the number is:

a) 33  
b) 330  
c) .33  
d) 100  
e) None of the above

5) If Jane leaves 15% of the $28 dinner check for the tip then what is the tip?

a) $5.36  
b) $4.20  
c) $1.87  
d) $1.20  
e) None of the above
6) Which of the following graph(s) is (one) graph(s) of a function(s)?

a) 

b) 

c) 

d) 

e) All of the above

7) Which of the following graph(s) is (one) not graph(s) of a function(s)?

a) 

b) 

c) 

d) 

e) None of the above

8) Which relation is a function?

I) \( \{(−2, 5), (2, 7), (−3, 5), (9, 9)\} \)

II) \( \{(−3, 2), (2, −2), (2, 3), (6, 6)\} \)

III) \( \{(−4, 6), (−2, 5), (−1, 4), (3, 6)\} \)
9) Which of the following points lies on the graph of $y = 3x - 5$

a) (1, -5)  
b) (0, 3)  
c) (-8, -10)  
d) (-4, -17)  
e) None of the above

10) Which of the following points lie on the graph of $g(x) = 2x^2 - 6x + 1$

a) (-3, 1)  
b) (-3, 37)  
c) (2, 21)  
d) (2, -3)  
e) None of the above

11) The slope through the points (-3, -5) and (1, 1) is equal to

a) $\frac{2}{3}$  
b) 2  
c) $\frac{3}{2}$  
d) -2  
e) None of the above
12) The slope through the points (-3,9) and (6,13) is equal to:

a) \( \frac{4}{9} \)

b) \( \frac{3}{5} \)

c) \( \frac{9}{4} \)

d) \( \frac{4}{3} \)

e) None of the above

13) Find the slope and y-intercept of \( 3x - 4y = 12 \)

a) \( m = \frac{4}{3} \) (0, -3)

b) \( m = \frac{4}{3} \) (-3,0)

c) \( m = -3 \) (0, -3)

d) \( m = -3 \) (-3,0)

e) None of the above

14) Find the slope and y-intercept of \( 4x + 7y = 21 \)

a) \( m = \frac{-4}{7} \) (0,3)

b) \( m = \frac{-4}{7} \) (3,0)

c) \( m = \frac{-7}{4} \) (0, \frac{21}{4})

d) \( m = \frac{-7}{4} \) (\frac{21}{4},0)

e) None of the above
15) Match the graph with its equation.

\[ y = -|x| + 2 \]  

\[ x^2 - 4 \]  

\[ x^2 + 2 \]  

\[ |x| + 2 \]  

e) None of the above

16) Match the graph with its equation

\[ -|x| + 3 \]  

\[ -x^2 + 3 \]  

\[ (-x)^2 + 3 \]  

\[ |x| + 3 \]  

e) None of the above
17) An equation of the line L is

a) $5y = 5x - 1$
b) $y = 5x - 5$
c) $y = x - 5$
d) $y = -x - 5$
e) None of the above

18) The equation of the line that passes through (4, -2) and (6, -3) is

a) $y = -2x + 9$
b) $y = -2x + 6$
c) $y = \frac{1}{2}x$
d) $y = \frac{1}{2}x - 9$
e) None of the above