

Math 118 Fall 2007

Finite Mathematics

Practice Pretest

Calculators are allowed.

1. Evaluate the expression:

$$3(-1)(6 - 10 - 2(10))$$

2. Evaluate the expression:

$$| - (-75 - 121) |$$

3. Evaluate the expression:

$$(-3)^4$$

4. Evaluate the expression:

$$-4^2$$

5. Perform the following operations and reduce your answer:

$$\frac{9}{6} + \frac{5}{8}$$

6. Perform the following operations and reduce your answer:

$$\frac{10}{8} + \frac{9}{11} + 4$$

7. Perform the following operations and reduce your answer:

$$\left(10 \div \frac{4}{5} \right) - \frac{4}{5}$$

8. Evaluate the expression:

$$\frac{1}{9}(9 + 7/5^2)$$

9. Solve for x :

$$9x + 6 = 2x + 3$$

10. Solve for x :

$$6(x + 9) + 4 = -4(x - 8) - 7$$

11. Solve for y :

$$-6y + 5(-3y - 9) = 9 + 8(-6 - y)$$

12. Solve the following system of equations:

$$\begin{cases} x + y = -4 \\ -x + 3y = 5 \end{cases}$$

13. Solve the following system of equations:

$$\begin{cases} 3x + y = 8 \\ -6x - 2y = -16 \end{cases}$$

14. Find the slope, x -intercept, and y -intercept for the line

$$8y - 9x - 9 = 0$$

15. Graph the following line:

$$3y + 4x = 9$$

16. A TV set was originally priced at \$250. The price was then reduced to 55% of the original. What is the new price of the TV set?

17. \$140 were allocated for competitions from the Math Lab budget of \$510. What is the percentage, to the nearest percent, of the budget that is allocated for competitions?

18. After a reduction of 65% , the price of a computer monitor is \$200. What was the original price?

19. An executive in an engineering firm earns a monthly salary plus a Christmas bonus of 6600 dollars. If she earns a total of 94,000 dollars per year, what is her monthly salary?

20. The admission fee at an amusement park is 1.5 dollars for children and 4 dollars for adults. On a certain day, 268 people entered the park, and the admission fees collected totaled 752 dollars. How many children and how many adults were admitted?