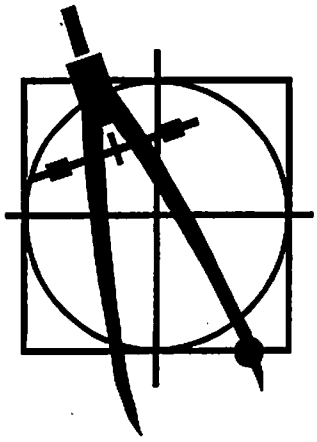


Spring 2010

Outcome Assessment
Math 110/112

Do NOT write in booklet.
Do all work on scratch paper. Put answers on scantron. NO CALCULATORS OR CELL PHONES ALLOWED.

Good Luck

TEST#:_____

Math 110/112 DEPARTMENT FINAL EXAM TEST#_____

Directions: **DO NOT WRITE ON THIS EXAM. USE THE SCRATCH PAPER PROVIVED.** Translate your answers to the SCANTRON form for all problems 1-25. **Good luck!** You have 1 hour, 15 minutes to complete this exam. Be sure to turn in ALL scratch paper along with this exam.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Evaluate.

1) $-19 - (-12)$ 1) _____

A) 31 B) -7 C) -31 D) 7

Simplify using order of operations.

2) $-2 + 15 \div (-9) \cdot 4$ 2) _____

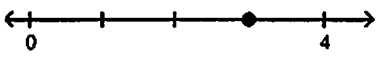
A) 16 B) -23 C) 23 D) -16

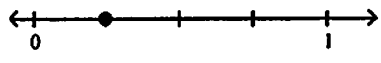
3) $50 \div (-5)^2 + (-6)$ 3) _____

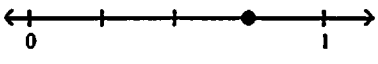
A) -8 B) 8 C) -4 D) 4

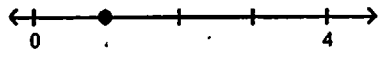
Graph the fraction on a number line.

4) $\frac{3}{4}$ 4) _____

A) 

B) 

C) 

D) 

Find the median for the set of numbers.

5) The number of steaks served at a local restaurant during the week are: 10, 8, 24, 40, 10, 45, 48. Find the MEDIAN number of steaks served. 5) _____

A) 40 steaks B) 10 steaks C) 24 steaks D) 26 steaks

Add or subtract. The answer should be a mixed number in correct form.

6) $13\frac{1}{7} - 8\frac{3}{7}$ 6) _____

A) $4\frac{4}{7}$ B) $21\frac{5}{7}$ C) $4\frac{5}{7}$ D) $5\frac{-2}{7}$

Evaluate.

7) $b^2 - 4ac$; $b = -5, a = 3, c = 6$ 7) _____

A) -57 B) -53 C) -47 D) -43

Decide whether the following is an expression or an equation.

8) $x^2 + 19xy - 5$ 8) _____

A) Equation B) Expression C) Both D) Neither

Solve.

9) $61 = 9x - 2$ 9) _____

A) $x = 8$ B) $x = 54$ C) $x = 7$ D) $x = 58$

Translate to an equation, then solve.

10) four more than a number is equal to fifteen. 10) _____

A) $4 - n = 15,\ n = -11$ B) $4 + n = 15,\ n = -11$

C) $n = 15 + 4,\ n = 19$ D) $n + 4 = 15,\ n = 11$

Find the mean. If necessary, round to one decimal place.

11) 15, 9, 4, 10, 7, 1, 5 11) _____

A) 8.8 B) 7.3 C) 6.8 D) 8.5

Insert <, >, or = between the pair of numbers to form a true statement.

12) $\frac{5}{3}$ ___ 1.665 12) _____

A) = B) < C) >

Solve.

13) $5.8x - 7.8 = 10.18$ 13) _____

A) $x = 17.98$ B) $x = 0.4$ C) $x = 2.38$ D) $x = 3.1$

Write the fraction as a decimal. If necessary, use repeating decimal notation.

14) $\frac{1}{11}$ 14) _____

A) $0.0\overline{9}$ B) 0.09 C) $0.\overline{090}$ D) $0.\overline{09}$

Solve the following percentage word problems.

15) 40% of all West Los Angeles College students have seen the movie Avatar. Out of 600 students, how many have seen Avatar? 15) _____

A) 240 students B) 340 students C) 2400 students D) 24 students

16) 3.52 is 100% of what number? 16) _____

A) 35,200 B) 352 C) 3.52 D) 352,000

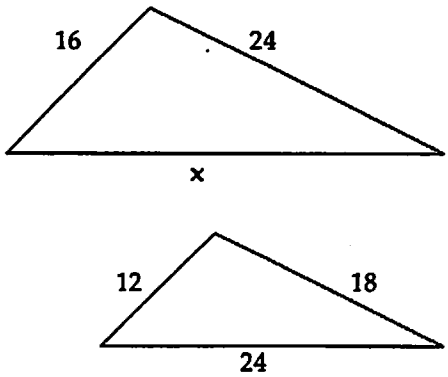
Simplify the following using the order of operations.

17) $8 - 4(12 - 9)$ 17) _____

A) 12 B) 7 C) -49 D) -4

Find any missing lengths in the similar shapes.

18) 18) _____



A) x = 24 B) x = 32 C) x = 40 D) x = 30

Subtract the fractions. Write the answer in lowest terms.

19) $\frac{7}{9} - \frac{1}{12}$ 19) _____

A) $\frac{25}{36}$ B) $\frac{1}{2}$ C) $\frac{13}{18}$ D) $\frac{2}{3}$

Solve the problem.

20) Monique sold $\frac{1}{4}$ box of data disks on Monday, $\frac{1}{8}$ box on Tuesday, and $\frac{5}{12}$ box on Wednesday. 20) _____

What was the total number of boxes Monique sold?

A) $\frac{19}{24}$ box B) $\frac{5}{6}$ box C) $\frac{1}{3}$ box D) $1\frac{4}{12}$ boxes

Find the unit rate.

21) $4200 earned in 5 weeks 21) _____

A) $420.00/week B) $0.0012/week C) $700.00/week D) $840/week

Find the best buy (based on cost per unit).

22) Brand A: 30 oz for $21.90 22) _____

Brand B: 24 oz for $16.80

A) Equal value B) Brand A

C) Brand B D) Not enough information

Solve the problem.

23) The distance from the downtown station to the last stop on a commuter railroad line is 31.5 miles. The distance between stops is about 3.5 miles. Once the train has left the downtown station, how many stops are there? This includes the last stop. 23) _____

A) 4 stops B) 10 stops C) 9 stops D) 8 stops

Round the number to the place indicated.

24) Round to the nearest hundredth: 14.84848 24) _____

A) 14.8485 B) 14.85 C) 14.848 D) 14.86

Solve.

25) Emily must send two packages. One of the packages weighs $18\frac{2}{9}$ lb. and the other weighs $13\frac{3}{5}$ lb. 25) _____

What is the total weight of the two packages?

A) $32\frac{37}{45}$ lb. B) $18\frac{37}{45}$ lb. C) $30\frac{37}{45}$ lb. D) $31\frac{37}{45}$ lb.