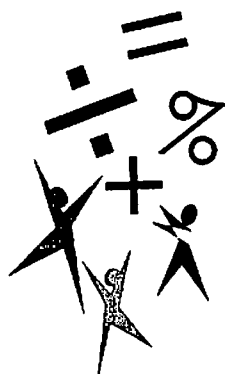


West Los Angeles College
Department of Mathematics

Final

For

Math 112: PreAlgebra



Math

Spring 2013

40 Multiple-Choice Questions
2 hours

Calculators NOT Allowed
Cell Phones NOT Allowed

Do NOT write on the Exam
Scratch paper will be provided

Test Version: B

Test# 60

Directions: Show all of your work on the SCRATCH PAPER PROVIDED. DO NOT WRITE ON THIS EXAM. You may NOT use a calculator or cell phone during the exam. Translate your answers to the SCANTRON form for all problems 1-40. 100 points total. Good luck! You have exactly 2 hours to complete this exam.

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

Write the percent as a fraction or mixed number in simplest form.

1) 37.5%

A) $37\frac{1}{2}$

B) $37\frac{3}{8}$

C) $\frac{3}{7}$

D) $\frac{3}{8}$

1) _____

2) $4\frac{5}{8}\%$

A) $462\frac{1}{2}$

B) $2\frac{5}{16}$

C) $\frac{37}{800}$

D) $46\frac{1}{4}$

2) _____

Find the sum or difference. Write the answer in lowest terms.

3) $\frac{5}{m} - \frac{k}{3}$

A) $\frac{5-k}{m-3}$

B) $\frac{15-mk}{3m}$

C) $\frac{15-k}{3m}$

D) $\frac{15-mk}{m}$

3) _____

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

4) Brand X: 12 oz for \$4.56

Brand Y: 16 oz for \$6.24

A) Not enough information

B) Brand X

C) Equal value

D) Brand Y

4) _____

Solve the problem.

5) David's net pay for a week at the video store was \$64.22. If he worked 13 hours that week, what was his net pay rate?

A) \$5.06/hour

B) \$5.35/hour

C) \$4.81/hour

D) \$4.94/hour

5) _____

Add or subtract.

6) $\frac{18}{17x} - \frac{8}{17x}$

A) $\frac{10}{17x}$

B) $\frac{10}{34x}$

C) $1\frac{7x}{10}$

D) 10

6) _____

7) $18\frac{2}{7} - 8\frac{6}{7}$

A) $26\frac{3}{7}$

B) $25\frac{3}{7}$

C) $9\frac{2}{7}$

D) $9\frac{3}{7}$

7) _____

8) $-\frac{14}{3} + 4$

A) 1

B) $-8\frac{7}{8}$

C) $-\frac{2}{3}$

D) $5\frac{11}{12}$

8) _____

9) $9\frac{2}{5} + 18\frac{1}{3}$

A) $9\frac{11}{15}$

B) $28\frac{11}{15}$

C) $27\frac{11}{15}$

D) $26\frac{11}{15}$

9) _____

10) $\frac{6}{8} + \frac{2}{14} + \frac{6}{15}$

A) $\frac{1}{10}$

B) $1\frac{41}{140}$

C) $2\frac{41}{70}$

D) $\frac{209}{420}$

10) _____

11) $-7.720 + (-3.035)$

A) 4.685

B) -10.755

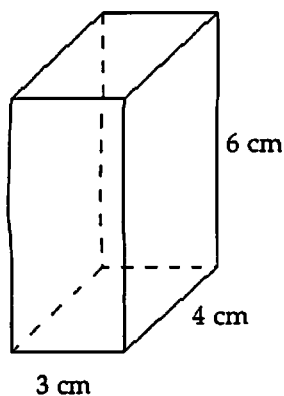
C) 23.430

D) 10.755

11) _____

Find the volume.

12)



3 cm

6 cm

4 cm

A) 27 cm^3

B) 13 cm^3

C) 72 cm^3

D) 72 cm^2

12) _____

Write as an equivalent decimal.

13) 51.9%

A) 28.5

B) 0.0519

C) 5.19

D) 0.519

13) _____

Solve.

14) $-36.68 = 7.7x + 4.9$

A) $x = -5.4$

B) $x = -6.7$

C) $x = -41.58$

D) $x = -51.38$

14) _____

15) $-6 + 10y + 18 = 4(2y - 6) - 8$

A) $y = -22$

B) $y = 22$

C) $y = -4$

D) $y = 4$

15) _____

Solve this equation.

16) $-19d = 0$

A) $d = -19$

B) $d = 19$

C) $d = 1$

D) $d = 0$

16) _____

Solve the problem.

17) In one game, a baseball pitcher throws 50% of his pitches for strikes. If the pitcher throws 44 strikes in the game, then how many pitches did he throw?

A) 22

B) 88

C) 44

D) 176

17) _____

Find the median for the data given.

18) Number of steaks served: 6, 10, 18, 21, 30, 36, 48

A) 21 steaks

B) 24 steaks

C) 30 steaks

D) 18 steaks

18) _____

Solve the problem.

19) The five sales people at Southwest Appliances earned commissions last year of \$16,000, \$30,000, \$49,000, \$15,000, and \$29,000. Find the mean commission.

A) \$29,190

B) \$27,800

C) \$30,580

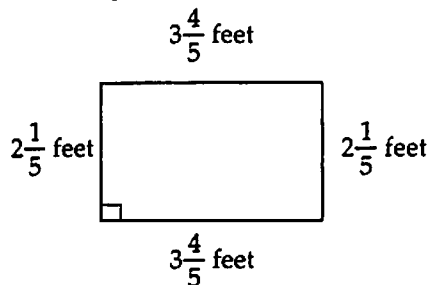
D) \$26,410

19) _____

Find the requested quantity. Write the answer in simplest form.

20) Find the perimeter.

20) _____



A) $4\frac{2}{5}$ feet

B) 12 feet

C) 6 feet

D) $7\frac{3}{5}$ feet

Simplify.

21) $\frac{5}{6} \div \frac{4}{5} \cdot \left(\frac{3}{10} - \frac{1}{2} \right)$

21) _____

A) $\frac{25}{96}$

B) $-5\frac{5}{24}$

C) $-\frac{5}{24}$

D) $-\frac{2}{15}$

Solve the problem. Write ratios in simplest form.

22) A baseball team has played 7 games so far this season. The team won 2 games. What is the ratio of games won to games played so far?

22) _____

A) $\frac{2}{9}$

B) $\frac{2}{7}$

C) $\frac{7}{2}$

D) $\frac{9}{2}$

Solve the problem.

23) A computer printer costs \$760. If the sales tax rate is $9\frac{1}{2}\%$, how much tax is charged and what is the total price? Round your answers to the nearest cent.

23) _____

A) \$72.20, \$832.20

B) \$79.80, \$839.80

C) \$722.00, \$1482.00

D) \$64.60, \$824.60

Simplify the given expression.

24) $2 + 5(4w + 2) - w$

24) _____

A) $21w + 12$

B) $19w + 4$

C) $21w - 12$

D) $19w + 12$

Translate to an equation, then solve.

25) seven more than a number is equal to twelve.

25) _____

A) $7 - n = 12$, $n = -5$

B) $n = 12 + 7$, $n = 19$

C) $7 + n = 12$, $n = -5$

D) $n + 7 = 12$, $n = 5$

Add.

26) $-3 + (-21) + (-5) + (-9)$

A) -22

B) 10

C) -38

D) -32

26) _____

Solve for the missing number.

27) $\frac{x}{28} = \frac{-1}{14}$

A) 4

B) -2

C) 392

D) $-\frac{1}{2}$

27) _____

Multiply. Write the answer in simplest form.

28) $\frac{3}{5} \cdot \frac{6}{7} \cdot \frac{1}{3}$

A) $\frac{6}{35}$

B) $\frac{7}{30}$

C) $\frac{18}{35}$

D) $\frac{2}{5}$

28) _____

Translate to a proportion.

29) 115% of what number is 41?

A) $\frac{w}{100} = \frac{41}{115}$

B) $\frac{115}{100} = \frac{w}{41}$

C) $\frac{115}{100} = \frac{41}{w}$

D) $\frac{41}{100} = \frac{115}{w}$

29) _____

Write as a decimal.

30) $\frac{11}{15}$

A) $0.\overline{71}$

B) $0.\overline{73}$

C) $0.\overline{63}$

D) $0.\overline{76}$

30) _____

Solve the problem.

31) A restaurant bill of \$88.17 was shared equally by 4 people. How much was each person's share?

Round your answer to the nearest cent.

A) \$23.04

B) \$23.15

C) \$22.15

D) \$22.04

31) _____

Solve.

32) $3.7 - 2x = -11.3$

A) 7

B) 15

C) 8.5

D) 7.5

32) _____

33) $y + \frac{8}{9} = \frac{1}{9}$

A) -1

B) $-\frac{2}{3}$

C) $-\frac{7}{9}$

D) $-\frac{7}{8}$

33) _____

34) Evaluate: $\frac{7x+2}{2y}$ when $x = 4$ and $y = -5$

A) 3

B) -4

C) -3

D) 4

34) _____

Solve.

35) $-\frac{3}{4}x = -21$

A) -28

B) $-\frac{7}{4}$

C) 28

D) $\frac{7}{4}$

35) _____

Solve the equation.

36) $3p - 13 = 2p - 15$

A) -1

B) -10

C) -2

D) -3

36) _____

Simplify.

37) $-6^2 - 7^2$

A) -85

B) -13

C) 85

D) -26

37) _____

Solve the equation.

38) $\frac{5}{9}n = \frac{1}{9}n + \frac{2}{3}$

A) $-\frac{3}{2}$

B) -1

C) 1

D) $\frac{3}{2}$

38) _____

Build a variable expression for the given phrase.

39) The product of eight and seven more than a number

A) $8(x + 7)$

B) $8 \cdot 7 + x$

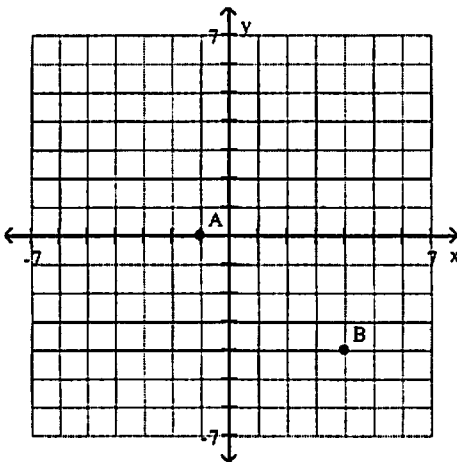
C) $8 + 7 \cdot x$

D) $(8 + 7)x$

39) _____

Give the coordinates of the labeled points.

40)



A) A(-1, 0); B(-4, -4)

C) A(-1, 1); B(4, -4)

B) A(-1, 0); B(4, -4)

D) A(1, 0); B(4, -4)

40) _____