Exam

Name_____

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

Multiply. Write the product in lowest terms.

1) $\left(\frac{8}{5}\right)\left(\frac{5}{4}\right)$ 1) _____

A) 3 B) 2 C) $-\frac{2}{5}$ D) $\frac{25}{32}$

2) $\left(\frac{7}{13}\right)\left(-\frac{14}{15}\right)$ 2) _____

A) $-\frac{26}{15}$ B) $\frac{28}{11}$ C) $-\frac{98}{195}$ D) $-\frac{7}{195}$

Divide. Write the quotient in lowest terms.

3) $\frac{14}{19} \div \frac{17}{13}$ 3) _____

A) $\frac{14}{323}$ B) $\frac{31}{32}$ C) $\frac{182}{323}$ D) $\frac{238}{247}$

4) $\left(\frac{1}{4}\right) \div \left(\frac{3}{16}\right)$ 4) _____

A) $\frac{1}{12}$ B) $\frac{3}{14}$ C) $\frac{4}{3}$ D) $\frac{3}{64}$

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

5) $\frac{5}{3} - \frac{5}{162}$ 5) _____

A) $\frac{5}{972}$ B) $\frac{5}{168}$ C) $\frac{265}{162}$ D) $\frac{265}{28}$

6) $\frac{1}{3} - \left(-\frac{5}{18}\right)$ 6) _____

A) 11 B) $\frac{11}{18}$ C) $\frac{18}{11}$ D) $\frac{7}{108}$

7) $\frac{16}{14x} - \frac{7}{14x}$ 7) _____

A) $\frac{9}{28x}$ B) 9 C) $\frac{9}{14x}$ D) $\frac{14x}{9}$

8) $\frac{15}{9x^2} - \frac{11}{9x^2}$ 8) _____

A) $\frac{9}{4x^2}$ B) 4 C) $\frac{4}{18x^4}$ D) $\frac{4}{9x^2}$

First, round the mixed numbers to the nearest whole number and estimate the answer. Then find the exact answer and write it in simplest form.

9) $2\frac{1}{4} \cdot 21\frac{1}{3}$ 9) _____

A) $42\frac{1}{12}$ B) 49 C) 48 D) 44

10) $2 \cdot 7\frac{7}{12}$ 10) _____

A) $14\frac{7}{12}$ B) $15\frac{3}{6}$ C) $9\frac{1}{6}$ D) $15\frac{1}{6}$

11) $17\frac{2}{3} + 9\frac{1}{8}$ 11) _____

A) $26\frac{19}{24}$ B) $25\frac{19}{24}$ C) $27\frac{19}{24}$ D) $17\frac{19}{24}$

Simplify.

12) $\frac{2}{7} \div \frac{4}{7} - \frac{3}{7}$ 12) _____

A) $\frac{11}{21}$ B) $\frac{11}{28}$ C) $\frac{1}{14}$ D) $\frac{2}{21}$

13) $\frac{1}{3} \div \frac{2}{7} \cdot \frac{7}{10}$ 13) _____

A) $4\frac{2}{7}$ B) $1\frac{11}{49}$ C) $\frac{1}{15}$ D) $\frac{49}{60}$

14) $\left(\frac{1}{2}\right)^2 \left(\frac{3}{5} - \frac{2}{5}\right)$ 14) _____

A) $-\frac{1}{10}$ B) $\frac{1}{5}$ C) $-\frac{1}{4}$ D) $\frac{1}{20}$

Solve the equation.

15) $-\frac{1}{2}x = 23$ 15) _____

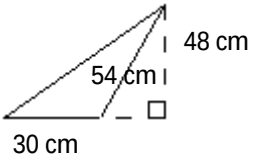
A) -46 B) -25 C) -23 D) -44

16) $-\frac{4}{21}y = -\frac{8}{15}$ 16) _____

A) $\frac{14}{5}$ B) $\frac{7}{10}$ C) $\frac{8}{35}$ D) $\frac{35}{8}$

Find the area.

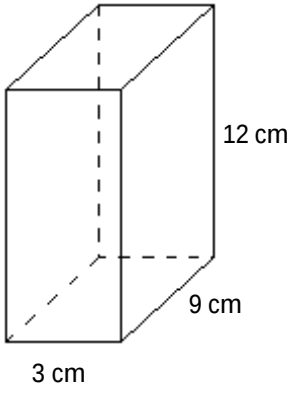
17) 17) _____



A) 1152 yd^2 B) 1440 yd^2 C) 1296 yd^2 D) 720 yd^2

Find the volume.

18) 18) _____



A) 324 cm^2 B) 24 cm^3 C) 324 cm^3 D) 111 cm^3

You are on a shopping trip. The store will round the amount you pay for each item to the nearest cent. Find the amount you will pay in each instance.

19) Compact disks are 3 for $15.55, so one CD is $5.1833. You pay: 19) _____

A) $5.183 B) $5.28 C) $5.18 D) $5.17

In order to prepare her budget, Sue gathers receipts for all major expenses she has had over the last month. Round the figure to the nearest dollar.

20) Tuition payment, $7516.92 20) _____

A) $7516.9 B) $7517 C) $7516.92 D) $7516

Perform the indicated operation.

21) 2.097 + (-2.164) 21) _____

A) -4.261 B) 4.538 C) -0.067 D) -4.161

22) -5.594 + (-7.326) 22) _____

A) -12.92 B) -1.732 C) 40.982 D) 12.92

Multiply.

23) (-0.1)(4.77) 23) _____

A) -0.477 B) 0.477 C) 4.87 D) 4.67

24) $(-3.6)(-12.1)$ 24) _____

A) -8.5 B) -15.7 C) 43.56 D) 15.7

Divide.

25) $-16.1 \div 23$ 25) _____

A) 7 B) -1.7 C) -7 D) -0.7

26) $\frac{2.46}{3}$ 26) _____

A) 8.2 B) 1.82 C) 0.82 D) 18.2

Write the fraction or mixed number as a decimal. Round to the nearest thousandth if necessary.

27) $\frac{13}{40}$ 27) _____

A) 3.077 B) 0.325 C) 0.033 D) 3.25

Write the decimal as a fraction or mixed number in lowest terms.

28) 0.336 28) _____

A) $\frac{42}{125}$ B) $\frac{42}{12}$ C) $\frac{1}{112,896}$ D) $\frac{1}{336}$

Find the mean for the list of numbers.

29) Scores on a math test: 79%, 44%, 79%, 94%, 44% 29) _____
Round answer to the nearest whole number if necessary.

A) 44% B) 94% C) 67% D) 68%

Solve the problem.

30) The batting percentages of some of the players on the company softball team are .246, .292, .206, .287, .247, .334, and .253. What is the mean of the batting percentages of these players? Round to the nearest thousandth. 30) _____

A) .280 B) .266 C) .242 D) .311

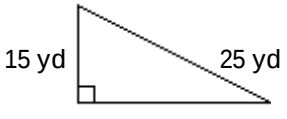
Find the square root. When necessary, round to nearest thousandth.

31) $\sqrt{35}$ 31) _____

A) 5.915 B) 5.916 C) 6.916 D) 5.926

Find the unknown length in the right triangle. If necessary, round to the nearest tenth.

32) 32) _____



A) 24 yd B) 18 yd C) 20 yd D) 25 yd

Solve the equation and check your solution.

33) $6.7 = x - 7.1$ 33) _____

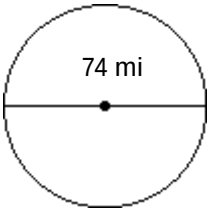
A) -0.4 B) -13.8 C) 13.8 D) 47.57

34) $-9.6y = 86.4$ 34) _____

A) -9 B) -77.4 C) -1.07 D) -72

Find the radius or diameter as requested.

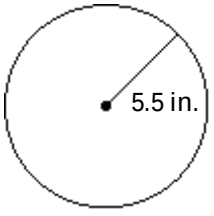
35) Find the radius. 35) _____



A) 4298.66 mi B) 18.5 mi C) 37 mi D) 116.18 mi

Find the circumference and area of the circle. Use 3.14 for π. Round your results to the nearest tenth.

36) 36) _____



A) $C \approx 34.5$ in., $A \approx 34.5$ in.^{2} B) $C \approx 17.3$ in., $A \approx 69.1$ in.^{2}

C) $C \approx 17.3$ in., $A \approx 379.9$ in.^{2} D) $C \approx 34.5$ in., $A \approx 95$ in.^{2}

Answer Key
Testname: UNTITLED1

1) B
2) C
3) C
4) C
5) C
6) B
7) C
8) D
9) C
10) D
11) A
12) C
13) D
14) D
15) A
16) A
17) D
18) C
19) C
20) B
21) C
22) A
23) A
24) C
25) D
26) C
27) B
28) A
29) D
30) B
31) B
32) C
33) C
34) A
35) C
36) D