

Outcome Assessment

Math 105

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

Good Luck

TEST#: _____

Directions: DO NOT WRITE ON THIS EXAM. USE THE SCRATCH PAPER PROVIDED. 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.

Write the whole number in words.

1) 70,146

A) Seven million, one thousand, forty-six
C) Seven hundred one thousand, forty-six

1) _____

B) Seventy thousand, one hundred forty-six
D) Seven thousand, one hundred forty-six

Write the whole number in standard form.

2) Raul collected eighty-two thousand dollars for his campaign.

A) 82,000
B) 80,002

C) 802,000

D) 8200

2) _____

Subtract. Check by adding.

$$\begin{array}{r} 653 \\ - 55 \\ \hline \end{array}$$

A) 708

B) 498

C) 598

D) 592

3) _____

Divide.

$$\begin{array}{r} 44 \overline{)39,160} \\ \text{A) } 880 \end{array}$$

B) 900 R 26

C) 890

D) 895 R 18

4) _____

Multiply.

$$\begin{array}{r} 1391 \times 72 \\ \text{A) } 9837 \end{array}$$

B) 100,152

C) 97,372

D) 12,519

5) _____

Simplify.

$$\begin{array}{r} 6[3^2 + 7(3 + 2)] \\ \text{A) } 480 \end{array}$$

B) 53

C) 264

D) 192

6) _____

List all the factors of the number.

7) 42

A) 1, 2, 3, 6, 7, 14, 28, 42
C) 7, 6, 14, 42

B) 1, 7, 6, 42
D) 1, 2, 3, 6, 7, 14, 21, 42

7) _____

Find the prime factorization of the number. Write any repeated factors using exponents.

8) 120

A) $2 \cdot 3 \cdot 5$

B) $2 \cdot 3^3 \cdot 5$

C) $2^3 \cdot 3 \cdot 5$

D) $2^2 \cdot 3 \cdot 5$

8) _____

Identify the number as prime or composite.

9) 1191

A) Composite

B) Prime

9) _____

Find the least common multiple (LCM) of the list of numbers.

10) $60, 80, 70$

A) 840

B) 10

C) 240

D) 1680

10) _____

Write the fraction as an equivalent fraction with the given denominator.

11) $\frac{10}{7} = \frac{\square}{21}$

A) $\frac{10}{21}$

B) $\frac{70}{21}$

C) $\frac{30}{21}$

D) $\frac{3}{21}$

11) _____

Add and simplify.

12) $\frac{1}{2} + \frac{3}{8}$

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

B) $\frac{15}{16}$

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

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

12) _____

Subtract. Convert your answer to a mixed number, if possible.

13) $\frac{28}{13} - \frac{5}{13}$

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

B) $2\frac{7}{13}$

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

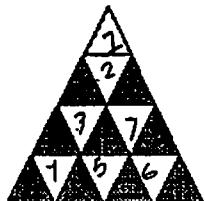
D) $1\frac{10}{13}$

13) _____

Write a fraction to represent the shaded part of the figure.

14)

14) _____



A) $\frac{9}{16}$

B) $\frac{7}{9}$

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

D) $\frac{7}{16}$

Add and simplify.

15)

15) _____

$9\frac{6}{7}$

$10\frac{3}{7}$

$+ 15\frac{6}{7}$

A) $35\frac{1}{7}$

B) 36

C) $37\frac{1}{7}$

D) $36\frac{1}{7}$

Determine whether the pair of fractions is equivalent.

16) $\frac{25}{55}$ and $\frac{20}{44}$

A) equivalent

B) not equivalent

16) _____

Write the decimal number in words.

17) 1.799

- A) one and seven hundred ninety-nine millionths
- B) one and seven hundred ninety-nine tenths
- C) one and seven hundred ninety-nine thousandths
- D) one and seven hundred ninety-nine hundredths

17) _____

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

18) 0.328

A) $\frac{1}{107,584}$

B) $\frac{1}{328}$

C) $\frac{41}{125}$

D) $\frac{41}{12}$

18) _____

Solve.

19) Find the total monthly cost of owning and maintaining a car given the information shown.

Monthly car payment: \$282.83

Monthly insurance cost: \$80.30

Average cost of gasoline per month: \$64.10

Average maintenance cost per month: \$23.50

A) \$460.73

B) \$450.73

C) \$450.63

D) \$451.73

19) _____

20) Mercedes bought a car part for \$21.50. If he paid with two \$20 bills, what was his change?

A) \$19.50

B) \$18.60

C) \$18.50

D) \$19.00

20) _____

Divide.

21) Divide 18 by 0.06

A) 300

B) 30

C) 0.3

D) 3

21) _____

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

22) 80%

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

B) 8

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

D) $1\frac{3}{5}$

22) _____

Write the fraction or mixed number as a percent.

23) $\frac{3}{16}$

A) 24%

B) 18%

C) $24\frac{3}{4}\%$

D) $18\frac{3}{4}\%$

23) _____

Write the percent as a decimal.

24) 823%

A) 823

B) 0.823

C) 8.23

D) 82.3

24) _____

Solve.

25) 40% of the students in a school are female. If there are 255 students altogether, how many students are female? 25) _____

A) 102 students B) 16 students C) 153 students D) 638 students