

# **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

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

1) \_\_\_\_\_

**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.**

3)

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

- A) 708                      B) 498                      C) 598                      D) 592

3) \_\_\_\_\_

**Divide.**

4)  $44 \overline{)39,160}$   
A) 880

- B) 900 R 26                      C) 890                      D) 895 R 18

4) \_\_\_\_\_

**Multiply.**

5)  $1391 \times 72$   
A) 9837

- B) 100,152                      C) 97,372                      D) 12,519

5) \_\_\_\_\_

**Simplify.**

6)  $6[3^2 + 7(3 + 2)]$   
A) 480

- 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)  $\frac{10}{7} = \frac{\quad}{21}$

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

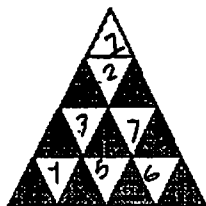
C)  $\frac{2}{3}$

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

13) \_\_\_\_\_

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

14)



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

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

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

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

14) \_\_\_\_\_

Add and simplify.

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

15) \_\_\_\_\_

Determine whether the pair of fractions is equivalent.

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

16) \_\_\_\_\_

A) equivalent

B) not equivalent

Write the decimal number in words.

17) 1.799

17) \_\_\_\_\_

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

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

18) 0.328

18) \_\_\_\_\_

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

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

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

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

Solve.

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

19) \_\_\_\_\_

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

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

20) \_\_\_\_\_

A) \$19.50

B) \$18.60

C) \$18.50

D) \$19.00

Divide.

21) Divide 18 by 0.06

21) \_\_\_\_\_

A) 300

B) 30

C) 0.3

D) 3

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

22) 80%

22) \_\_\_\_\_

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

B) 8

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

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

Write the fraction or mixed number as a percent.

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

23) \_\_\_\_\_

A) 24%

B) 18%

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

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

Write the percent as a decimal.

24) 823%

24) \_\_\_\_\_

A) 823

B) 0.823

C) 8.23

D) 82.3

**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