MAT 050 Practice Test Chapters 5, 6 and 8 Lial
All test answers are to be in simplest form. A calculator may be used.
Cell phones, iPads, and other electronic devices with scanning or photo ability may NOT be used.
No books, notes and no homework may be used while taking this test.

The test will include several fill in the blank questions covering voculary from the list below.

gram	meter	proportion	discount
liter	percent	ratio	unit rate

Write the ratio as a fraction in simplest form.

1) 12 to 30

2) 3.5 : 9.8

3) $9\frac{1}{2} : 5\frac{1}{2}$

4) $\frac{2}{6}$ to $\frac{6}{10}$

5) 12 min : 52 hours

Write the rate as a unit rate using appropriate labels.

6) A boy pays 6 cents for 3 marbles.

7) A vendor earns $5680 in 8 weeks.

Determine if the equation is a proportion.

8) $\frac{3.2}{4.9} \overset{?}{=} \frac{6.5}{9.1}$

9) $\frac{\frac{13}{4}}{\frac{4}{13}} \overset{?}{=} \frac{\frac{3}{4}}{\frac{12}{169}}$

Solve the proportion.

10) $\frac{5}{a} = \frac{25}{20}$

11) $\frac{1}{2} = \frac{k}{19}$

12) $\frac{-3}{n} = \frac{-0.9}{6.3}$

13) $\frac{16}{x} = \frac{8}{\frac{1}{2}}$

14) $\frac{\frac{1}{56}}{\frac{1}{7}} = \frac{\frac{1}{7}}{y}$

Convert the measurement as indicated.

15) 9.7 miles to feet

16) 26,400 feet to miles

17) $6\frac{1}{2}$ feet to inches

Convert the measurement as indicated.

18) 1.59 tons to pounds

19) 264 fluid ounces to cups

20) 51.50 millimeters to meters

21) 839 milligrams to kilograms

22) 0.0079 centigrams to milligrams

23) 0.33 hectoliters to liters

Write the decimal as a percent.

24) 5.1

25) 0.023

26) 0.2411

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

27) 5%

28) 150%

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

29) $3\frac{7}{8}\%$

30) 0.9%

31) $48\frac{1}{4}\%$

Write the fraction or mixed number as a percent. If necessary, round the percentage to the nearest tenth.

32) $\dfrac{1}{6}$

33) $\dfrac{9}{20}$

34) $7\frac{2}{5}$

Find the unknown value.

35) What number is 40% of 700?

36) 37.5% of 1800 is what number?

37) 1.9 is what percent of 4?

38) What percent of 1200 is 60?

Solve.

39)   A phone costs $112 and a battery recharger costs $38. What is the total price for purchasing these items if the sales tax rate is 9%?

Solve. Round to the nearest tenth, if necessary.

40)   Before taking a typing course, Leo could type 32 words per minute. By the end of the course, he was able to type 85 words per minute. Find the percent increase.

Solve.

41)   Find the sale price when the original price is $15,800.00 and the discount rate is 21%.

Solve the problem.

42)   An investigating officer examining skid marks at the scene of an accident estimates the speed of the vehicle to have been 87 feet per second. Find the vehicle speed in miles per hour and was the driver exceeding the 55 miles per hour speed limit?

43)

   Know formulas to find:
   Perimeter
   Area of a triangle, rectangle, parallelogr
   Circumference and Area of a circle.

1) $\dfrac{2}{5}$

2) $\dfrac{5}{14}$

3) $\dfrac{19}{11}$

4) $\dfrac{5}{9}$

5) $\dfrac{3}{13}$ — $\dfrac{1}{260}$ (ratio)

6) 2 cents/marble
7) $710.00/wk
8) No
9) Yes
10) 4
11) 9.5
12) 21
13) 1

14) $\dfrac{8}{7}$

15) 51,216 ft
16) 5 mi
17) 78 in.
18) 3180 lb
19) 33 c
20) 0.0515 m
21) 0.000839 kg
22) 0.079 mg
23) 33 L
24) 510%
25) 2.3%
26) 24.11%

27) $\dfrac{1}{20}$

28) $1\dfrac{1}{2}$

29) $\dfrac{31}{800}$

30) 0.009

31) 0.4825
32) 16.7%
33) 45%
34) 740%
35) 280
36) 675
37) 47.5%
38) 5%
39) $163.50
40) 165.6%
41) $12,482.00
42) Yes. The driver was traveling 59 mi/hr.
43)