

MAT 050 Practice Test Chapters 6 and 7

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.

One page of notes, (8 1/2 inches by 11 inches) using both sides are allowed.

No books, no homework may be used while taking this test.

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

gram
liter

meter
percent

proportion
ratio

discount
unit rate

Write the ratio as a fraction in simplest form.

1) 12 to 30

2) 12 : 52

3) 3.5 : 9.8

4) $9\frac{1}{2} : 5\frac{1}{2}$

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

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.

8) There are 966 cars in 420 households.

Solve the proportion.

12) $\frac{x}{30} = \frac{7}{15}$

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

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

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

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

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

Determine if the equation is a proportion.

9) $\frac{8}{10} \stackrel{?}{=} \frac{16}{20}$

10) $\frac{3.2}{4.9} \stackrel{?}{=} \frac{6.5}{9.1}$

11) $\frac{\frac{13}{4}}{\frac{4}{13}} \stackrel{?}{=} \frac{\frac{3}{4}}{\frac{12}{169}}$

Convert the measurement as indicated.

18) 9.7 miles to feet

19) 26,400 feet to miles

20) 73 feet to yards

21) $6\frac{1}{2}$ feet to inches

Convert the measurement as indicated.

- 22) 1.59 tons to pounds
- 23) 560 ounces to pounds
- 24) $14\frac{1}{4}$ pounds to ounces
- 25) 264 fluid ounces to cups
- 26) $18\frac{1}{4}$ gallons to quarts
- 27) $2\frac{1}{2}$ pints to cups
- 28) 51.50 millimeters to meters
- 29) 51.44 meters to decimeters
- 30) 94.37 dekameters to meters
- 31) 1.697 decigrams to grams
- 32) 839 milligrams to kilograms
- 33) 0.0079 centigrams to milligrams
- 34) 8.6 centiliters to dekaliters
- 35) 0.33 hectoliters to liters

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

- 36) 5%
- 37) 150%
- 38) $3\frac{7}{8}\%$

Write the percent as a decimal.

- 39) 140%
- 40) 0.9%
- 41) $48\frac{1}{4}\%$

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

- 42) $\frac{1}{6}$
- 43) $\frac{9}{20}$
- 44) $7\frac{2}{5}$

Write the decimal as a percent.

- 45) 5.1
- 46) 0.023
- 47) 0.2411

Find the unknown value.

- 48) What number is 40% of 700?
- 49) 37.5% of 1800 is what number?
- 50) 1.9 is what percent of 4?
- 51) What percent of 1200 is 60?
- 52) 16 is 2% of what number?
- 53) 35% of what number is 84?