## PRACTICE EXAM CHAPTER 6

Write the ratio as a ratio of whole numbers using fractional notation. Write the fraction in simplest form.

1) 6.7 to 10

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

2) 190 kilometers to 80 kilometers

2) \_\_\_\_\_

3)  $5\frac{1}{3}$  to  $4\frac{5}{6}$ 

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

Write the rate as a fraction in simplest form.

4) 600 miles in 32 hours

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

5) 7 cars for 49 people

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

Write the rate as a unit rate.

6) 322 miles on 14 gallons of gas

6) \_\_\_\_\_

Find the unit price.

7) \$52.00 for 5 compact discs

7) \_\_\_\_\_

Solve the proportion for the given variable.

8) 
$$\frac{z}{7} = \frac{36}{30}$$

8) \_\_\_\_\_

$$9) \frac{\frac{4}{3}}{\frac{12}{9}} = \frac{14}{n}$$

9) \_\_\_\_\_

$$10) \frac{-6}{n} = \frac{-0.6}{2.4}$$

10) \_\_\_\_\_

Solve.

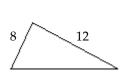
11) On an architect's blueprint, 1 inch corresponds to 6 feet. If an exterior wall is 21 feet long, find how long the blueprint measurement should be. Write the answer as a mixed number if necessary.

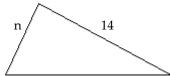
11) \_\_\_\_\_

Given that the pair of triangles is similar, find the length of the side labeled n. Round your results to 1 decimal place, if necessary.

12)

12) \_\_\_\_\_





Find the square root.

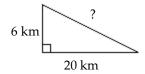
13) 
$$\sqrt{\frac{25}{196}}$$

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

Find the unknown length in the right triangle. If necessary, approximate the length to the nearest thousandth.

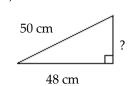
14)

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



15)





## Answer Key

## Testname: MATH 110 PRACTICE EXAM CHAP 6

- 1)  $\frac{67}{100}$
- 2)  $\frac{19}{8}$
- 3)  $\frac{32}{29}$
- $4)\,\frac{75\,\mathrm{mi}}{4\,\mathrm{hr}}$
- 5)  $\frac{1 \text{ car}}{7 \text{ people}}$
- 6) 23 mi/gal
- 7) \$10.40 per compact disc
- 8)  $\frac{42}{5}$
- 9) 14
- 10) 24
- 11)  $3\frac{1}{2}$  in.
- 12) 9.3
- 13)  $\frac{5}{14}$
- 14) 20.881 km
- 15) 14 cm