Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Chapter 7 Final Review

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Between which two integers does $-\sqrt{41}$ lie?
a. 6 and 7
b. –6 and –7
c. –7 and –8
d. –20 and –21

____ 2. Write the decimal as a fraction or mixed number.

$4.\overline{82}$

a. $5\frac{65}{99}$
b. $4\frac{82}{99}$
c. $4\frac{41}{50}$
d. $4\frac{86}{99}$

____ 3. Write the decimal as a fraction or mixed number.

$6.\overline{7}$

a. $7\frac{5}{9}$
b. $7\frac{4}{9}$
c. $6\frac{7}{9}$
d. $6\frac{7}{10}$

Name the word that matches the definition given.

____ 4. A number that, when multiplied by itself, equals a given number
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 5. A number with integers as its square roots
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 6. The symbol $\sqrt{\ }$ which is used to represent a square root
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 7. The number under a radical sign.
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 8. A number that, when multiplied by itself, and then multiplied by itself again, equals a given number.
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 9. A number that can be written as the cube of an integer.
a. square root
b. perfect square
c. radical sign
d. radicand
e. cube root
f. perfect cube

____ 10. In any right triangle, the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse.
a. theorem
b. legs
c. hypotenuse
d. Pythagorean Theorem
e. irrational number
f. real number

____ 11. The two sides of a right triangle that form the right angle.
a. theorem
b. legs
c. hypotenuse
d. Pythagorean Theorem
e. irrational number
f. real number

____ 12. The side of a right triangle that is opposite the right angle.
a. theorem
b. legs
c. hypotenuse
d. Pythagorean Theorem
e. irrational number
f. real number

____ 13. A number that cannot be written as the ratio of two integers.
a. theorem
b. legs
c. hypotenuse
d. Pythagorean Theorem
e. irrational number
f. real number

____ 14. The set of all rational and irrational numbers
a. theorem
b. legs
c. hypotenuse
d. Pythagorean Theorem
e. irrational number
f. real numbers

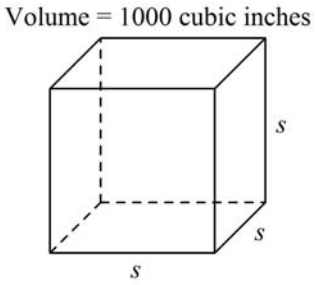
____ 15. Evaluate the expression.

$69 - \left(\sqrt{4}\right)^2$

a. 73
b. 67
c. 65
d. 53

Find the side length of the cube.

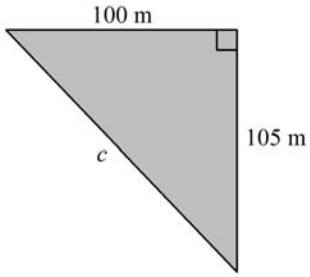
____ 16.



a. 10 inches
b. 300 inches
c. 100 inches
d. 600 inches

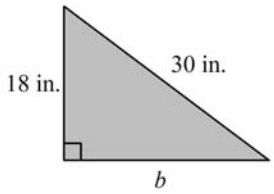
Find the missing length of the triangle.

____ 17.



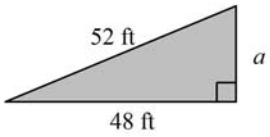
a. 147 m
b. 143 m
c. 145 m
d. 32 m

____ 18.



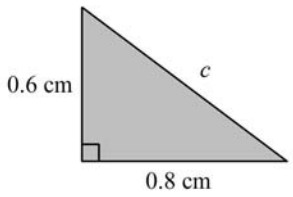
a. 24 in.
b. 23 in.
c. 35 in.
d. 26 in.

____ 19.



a. 70.8 ft
b. 21 ft
c. 22 ft
d. 20 ft

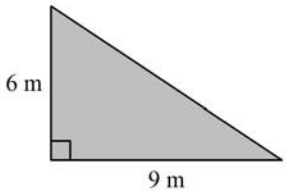
____ 20.



a. 1 cm
b. 0.53 cm
c. 0.9 cm
d. 1.1 cm

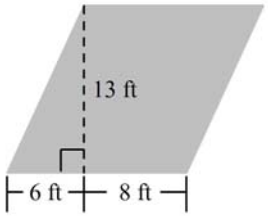
Find the perimeter. Round your answer to the nearest tenth.

____ 21. Right triangle



a. 132 m
b. 21.7 m
c. 10.8 m
d. 25.8 m

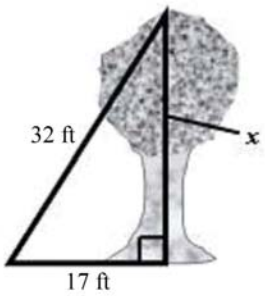
____ 22. Parallelogram



a. 182 m
b. 54 m
c. 56.6 m
d. 51.1 m

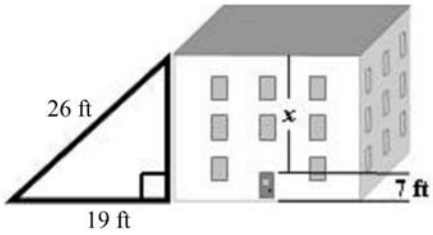
Find the height *x*. Round your answer to the nearest tenth.

____ 23.



a. 31.7 ft
b. 27.1 ft
c. 36.2 ft
d. 24.5 ft

____ 24.



a. 25.2 ft
b. 15.5 ft
c. 10.7 ft
d. 17.7 ft