Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_

7.G.4

\_\_\_\_\_1. What is the radius, in centimeters, of a circle that has a circumference of 16π centimeters?

(2015)

A. 8 B. 16 C. 32 D. 64

\_\_\_\_\_2. The mean radius of Earth is 6,371.0 kilometers and the mean radius of Earth’s Moon is 1,737.5

kilometers. What is the approximate difference in the mean circumferences, in kilometers, of

Earth and Earth’s Moon? Round your answer to the nearest tenth of a kilometer. (2015)

A. 40,030.2 B. 29,113.1 C. 14,556.6 D. 10,917.0

\_\_\_\_\_3. Kiyo used wire fencing to form a border around a circular region in his back yard. If the radius

of the circular region was 5 yards, what was the total length of the border, rounded to the

nearest tenth of a yard? (2017)

A. 15.7 B. 31.4 C. 78.5 D. 157.1

\_\_\_\_\_4. A circle has a diameter of 26 units. What is the area of the circle to the nearest hundredth of a

square unit? (2017)

A. 81.68 B. 530.93 C. 2,123.72 D. 8,494.87

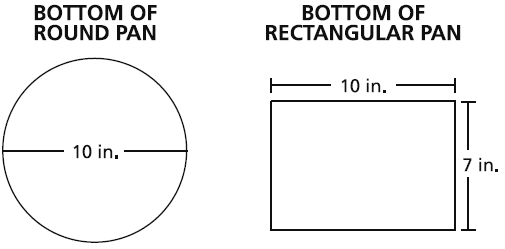
\_\_\_\_\_5. The circumference of a circle is 15π centimeters. What is the area of the circle in terms

of π. (2018)

1. 7.5π cm2 B. 15π cm2 C. 56.25π cm2 D. 225π cm2

\_\_\_\_\_6. Jordan is baking brownies and will choose to use either a round or a rectangular pan. The

dimensions of the bottom of each pan are shown below.



Which statement correctly describes how the area of the bottom of the round pan compares to

the area of the bottom of the rectangular pan? (2019)

A. The area of the bottom of the round pan is greater than the area of the bottom

of the rectangular pan by about 8.5 square inches.

1. The area of the bottom of the round pan is greater than the area of the bottom

of the rectangular pan by about 244.2 square inches.

1. The area of the bottom of the round pan is less than the area of the bottom of the

rectangular pan by about 7.2 square inches.

D. The area of the bottom of the round pan is less than the area of the bottom of the

rectangular pan by about 38.6 square inches.

7. The circumference of a circle is 11π inches. What is the area, in square inches, of the circle?

Express your answer in terms of π. (2014)

***Show your work***

***Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** square inches

8. A contractor is building the base of a circular fountain. On the blueprint, the base of the

fountain has a diameter of 18 centimeters. The blueprint has a scale of three centimeters to

four feet. What will be the actual area of the base of the fountain, in square feet, after it is

built? Round your answer to the nearest tenth of a square foot. (2016)

***Show your work***

**Answer**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ square feet

**7.G.1**

\_\_\_\_\_1. The scale of a model train is 1 inch to 13.5 feet. One of the cars of the model train is 5 inches

long. What is the length, in feet, of the actual train car? (2014)

A. 67.5 B. 32.4 C. 14.5 D. 2.7

\_\_\_\_\_2. The drawing of a building, shown below, has a scale of 1 inch to 30 feet. (2016)



What is the actual height, in feet, of the building? (No calculator)

A. 22.5 B. 24 C. 37.5 D. 40

\_\_\_\_\_3. Jensen stopped at a rest area A along the side of the highway. His map, shown below, has a

scale of 1 inch to 35 miles



Jensen planned to stop at rest area B next. What is the actual distance, in miles, between the two rest areas? (2017) no calculator

1. 14.0 B. 37.5 C.70.5 D. 87.5

\_\_\_\_\_4. In a scale drawing of an apartment, 1 centimeter represents feet. If the length of the

kitchen is cm on the scale drawing, what is the actual length, in feet, of the kitchen? (2017)

1. B. C. D.

\_\_\_\_\_5. Howard has a scale model of the Statue of Liberty. (2018)

* The model is 15 inches tall.
* The scale of the model to the actual statue is 1 inch : 6.2 meters.

Which equation can Howard use to determine *x*, the height in meters, of the Statue of Liberty?

1. 15x = 6.2 B. 6.2x = 15 C. D.

\_\_\_\_\_6. The scale drawing of a field in the shape of a triangle is shown below. (2017)



What is the actual area, in square meters, of this field?

A. 8.75 B. 17.5 C. 35 D. 70

\_\_\_\_\_7. Danielle constructs a scale model of a building with a rectangular base. Her model is 2 inches in

length and 1 inch in width. The scale on the model is 1 inch = 47 feet. What is the actual area,

in square feet, of the base of the building? (2019)

A. 141 B. 282 C. 2,209 D. 4,418

8. The rectangular floor of a classroom is 36 feet in length and 32 feet in width. A scale drawing of the

floor has a length of 9 inches. What is the area, in square inches, of the floor in the scale drawing?

***Show your work*** (2018)

***Answer*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ square inches