

Why Is a Mathematician Like an Airline?

Round each answer to the nearest hundredth (if necessary) and find it in the appropriate answer column. Use 3.14 for π . Fill in the correct unit of measure for each answer you choose. Write the letter of the exercise in the box containing the number of the answer.

1. A circle has a radius of 12 in. Find:

- (E) The diameter of the circle.
- (H) The circumference of the circle.
- (T) The area of the circle.

2. A circle has a radius of 4.4 cm. Find:

- (S) The diameter of the circle.
- (Y) The circumference of the circle.
- (H) The area of the circle.

3. A circle has a diameter of 60 m. Find:

- (I) The radius of the circle.
- (O) The circumference of the circle.
- (T) The area of the circle.

4. A circle has a diameter of 1.8 km. Find:

- (O) The radius of the circle.
- (E) The circumference of the circle.
- (U) The area of the circle.

5. Solve.

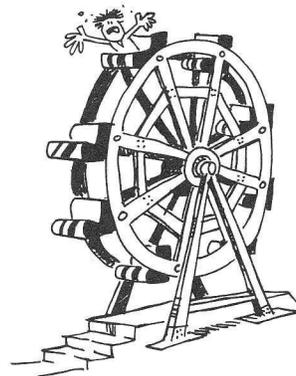
- (B) Jack's cow is tied to a beanstalk with a piece of rope that is 15 ft long. What is the area of the circle in which the cow can graze?
- (T) A round game table has a diameter of 1 m. How much plastic laminate is needed to cover the top of this table?
- (S) The diameter of the earth at the equator is about 8,000 mi. Based on this figure, how far is it around the earth?
- (P) Radio station KROQ broadcasts in all directions to a distance of 40 mi. How many square miles are in the station's broadcast area?
- (L) **WORLD RECORD:** The world's largest Ferris Wheel was built in London in 1897. The wheel had a radius of 150 ft. How far would you travel in one turn of this wheel?

Answers 1 – 3:

- (4) 27.63
- (14) 61.43
- (16) 30
- (2) 75.36
- (12) 461.36
- (21) 8.8
- (17) 172.4
- (13) 24
- (9) 60.79
- (1) 2,826
- (8) 452.16
- (5) 25.51
- (7) 188.4
- (10) 2,516

Answers 4 – 5:

- (15) 898
- (6) 706.5
- (13) 5,174
- (5) 24,930
- (11) 2.54
- (20) 0.79
- (19) 0.9
- (18) 942
- (10) 690.5
- (14) 2.91
- (15) 5,024
- (3) 5.65
- (17) 0.87
- (12) 25,120



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
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How Do You Get a One-Armed Monkey Down From a Coconut Tree?



Solve each problem. Use 3.14 for π . Find your answer and cross out the letter next to it. When you finish, the answer to the title question will remain.

E	95 in. ²
M	9.2 in.
T	706.5 cm ²
I	8.3 m
E	8.4 in.
R	26 ft
H	1,670 ft ²
T	131 in. ²
O	30 ft
Y	9.6 in.
A	127.2 cm ²
R	2.5 cm
E	28 ft
V	69.5 in. ²
T	21.5 in. ²
I	154 in. ²
A	814.5 cm ²
G	7.8 m
N	593.5 cm ²
I	59 in. ²
W	30.5 in. ²
S	78.5 in. ²
H	1,960 ft ²
T	113.0 cm ²

- Find the diameter of a circle if the circumference is 8 cm. Round to the nearest tenth.
- Find the diameter of a circle if the circumference is 24.5 m. Round to the nearest tenth.
- The largest living thing on earth is a California sequoia tree named the "General Sherman." The circumference of its trunk is about 82 ft. Find the diameter of the trunk to the nearest whole number.
- A revolving water sprinkler sprays water in all directions to a distance of 25 ft. What area does it cover? Round to the nearest 10 ft².
- Pizza Mind Pizza sells a large pizza with a diameter of 14 in. and a medium pizza with a diameter of 11 in. Find the following to the nearest whole number:
 - The area of the large pizza.
 - The area of the medium pizza.
 - How much larger is the large pizza?
- Nick Claus plans to have a model train running in a circle around his holiday tree. How many feet of track will he need if the diameter of the circle is 9.5 ft? Round to the nearest whole number.
- A record has a radius of 15 cm. The label has a radius of 6 cm. Find the following to the nearest tenth:
 - The area of the record (including the label).
 - The area of the label.
 - The area of the record that is not covered by the label.
- The diameter of a basketball hoop is 18 in. The circumference of a basketball is 30 in.
 - Find the diameter of the basketball. Round to the nearest tenth.
 - How much less is the diameter of the basketball than the diameter of the hoop?
- A circle is cut out of a piece of plywood that is 10 in. square. The scraps are thrown away.
 - Find the area of the circle.
 - How many square inches of plywood are thrown away?

