

**GRADE 10 ESSENTIAL  
UNIT D – 2D GEOMETRY  
CIRCUMFERENCE**

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

**USE Ruler**

## Why Did the Piano Player Bang Her Head Against the Keyboard?

Find the circumference ( $C$ ) of each circle, given the diameter ( $d$ ) or radius ( $r$ ). Use 3.14 for  $\pi$ . Draw a straight line connecting the square by the exercise to the square by its answer. The line will cross a number and a letter. Write the letter in the matching numbered box. **USE 3.14 otherwise your answer won't match**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
								<b>A</b>									

<p>① <math>d = 3</math> cm ◆</p> <p>② <math>d = 8</math> in. ◆</p> <p>③ <math>d = 7</math> cm ◆</p> <p>④ <math>d = 40</math> in. ◆</p> <p>⑤ <math>d = 9.2</math> cm ◆</p> <p>⑥ <math>d = 1.5</math> in. ◆</p> <p>⑦ <math>d = 600</math> m ◆</p> <p>⑧ <math>d = 23</math> in. ◆</p> <p>⑨ <math>d = 10</math> cm ◆</p> <p>⑩ <math>r = 1</math> in. ◆</p> <p>⑪ <math>r = 6</math> cm ◆</p> <p>⑫ <math>r = 15</math> in. ◆</p> <p>⑬ <math>r = 2.2</math> cm ◆</p> <p>⑭ <math>r = 48</math> in. ◆</p> <p>⑮ <math>r = 3.9</math> cm ◆</p> <p>⑯ <math>r = 2.5</math> in. ◆</p> <p>⑰ <math>r = 2.5</math> cm ◆</p> <p>⑱ <math>r = 50</math> m ◆</p>	<p><b>No need to show work this page</b></p>	<p>◆ <math>C = 125.6</math> in.</p> <p>◆ <math>C = 31.4</math> cm</p> <p>◆ <math>C = 94.2</math> in.</p> <p>◆ <math>C = 9.42</math> cm</p> <p>◆ <math>C = 72.22</math> in.</p> <p>◆ <math>C = 301.44</math> in.</p> <p>◆ <math>C = 25.12</math> in.</p> <p>◆ <math>C = 15.7</math> in.</p> <p>◆ <math>C = 28.888</math> cm</p> <p>◆ <math>C = 13.816</math> cm</p> <p>◆ <math>C = 15.7</math> cm</p> <p>◆ <math>C = 21.98</math> cm</p> <p>◆ <math>C = 6.28</math> in.</p> <p>◆ <math>C = 314</math> m</p> <p>◆ <math>C = 4.71</math> in.</p> <p>◆ <math>C = 37.68</math> cm</p> <p>◆ <math>C = 24.492</math> cm</p> <p>◆ <math>C = 1,884</math> m</p>
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ANSWERS A - I:

18.84 ft	GUY
71.8 ft	HELPED
1,570 m	BOX
51 ft	HAMBURGER
11.932 cm	A
12.56 cm	THE
44 ft	VEGETABLES
13.188 m	WHO
1,630 m	BIG
282.6 m	SILLY
31.4 cm	OF
62.8 ft	DUMPED
11.542 cm	OFF

# Did You Hear About...

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
					?

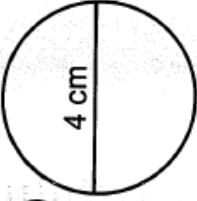
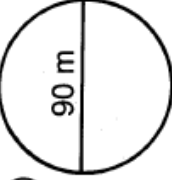
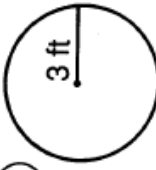
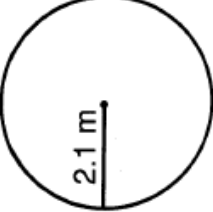
Answers J - R:

$5\frac{2}{7}$ in.	FRESH
22 in.	HE
37.68 ft	EARTH
88 in.	ON
34.5 ft	SUBMARINE
660 mm	WANTED
132 mm	BECAUSE
84.78 in.	ON
154 mm	THE
720 mm	JUMPED
$4\frac{5}{7}$ in.	PEAS
143 mm	TOP
33 ft	GROUND

*(Show work) on separate page if necessary*

Find each answer in the appropriate answer column and notice the word under it. Write this word in the box containing the letter of the exercise.

I. Find the circumference of each circle. Use 3.14 for  $\pi$ .

(A)  (B)  (C)  (D) 

(E)  $d = 20$  ft (F)  $d = 3.8$  cm (G)  $r = 250$  m (H)  $r = 5$  cm

II. Find the circumference of each circle. Use  $\frac{22}{7}$  for  $\pi$ .

(I)  $d = 14$  ft (J)  $d = 28$  in. (K)  $d = 49$  mm (L)  $d = 10\frac{1}{2}$  ft

(M)  $r = 21$  mm (N)  $r = 3\frac{1}{2}$  in. (O)  $r = 105$  mm (P)  $r = \frac{3}{4}$  in.

III. Solve. Use 3.14 for  $\pi$ .

- (Q) The wheels on a bicycle have a diameter of 27 in. How far does the bicycle travel with each turn of the wheels?
- (R) The minute hand of a large clock is 6 ft long. How far does the point of the hand move in one hour?