



**8.6 Puzzle Time**

$$2\pi r^2 + 2\pi r h$$

**Did You Hear About...**

A	B	C	D	E	F
G	H	I spent	J a	K week	L trying
M to	N know	O his	P old	Q one	R away

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

565.2 m <sup>2</sup> WEEK
276.3 m <sup>2</sup> AND
753.6 ft <sup>2</sup> HIS
424.3 in. <sup>2</sup> CATCH
401.9 m <sup>2</sup> BOUGHT
325.2 ft <sup>2</sup> DAY
439.6 cm <sup>2</sup> AWAY
301.4 m <sup>2</sup> OLD
282.6 cm <sup>2</sup> BOOMERANG
533.8 in. <sup>2</sup> THROW
100.5 ft <sup>2</sup> MAN

~~Find the combined area of both bases of the cylinder with the given radius. Round your answer to the nearest tenth.~~

- ~~A. r = 2 in.                      B. r = 4 ft  
C. r = 5 cm                      D. r = 8 m~~

~~Find the area of the lateral surface of the cylinder.~~

- ~~E. r = 2 ft; h = 6 ft              F. r = 8 in.; h = 7 in.  
G. r = 9 cm; h = 5 cm          H. r = 4 m; h = 11 m~~

Find the surface area of the cylinder with the given dimensions. Round your answer to the nearest tenth.

- I. r = 1 in.; h = 7 in. 50.24      J. r = 5 cm; h = 3 cm 251.2  
 K. r = 6 m; h = 9 m 565.2      L. r = 2 ft; h = 8 ft 125.6  
 M. r = 4 m; h = 4 m 200.96      N. r = 5 in.; h = 12 in. 533.8  
 O. r = 10 ft; h = 2 ft 725.6      P. r = 3 m; h = 13 m 301.44

Q. A cylindrical cookie jar has a height of 9 inches. The radius of its base is 4 inches. What is its surface area? Round your answer to the nearest tenth.

$$2 \cdot \pi \cdot 16 + 2 \cdot \pi \cdot 4 \cdot 9 = \underline{326.56}$$

R. A cylindrical coffee can has a height of 14 centimeters. The radius of its base is 5 centimeters. What is the lateral surface area of the can?

$$2 \cdot \pi \cdot 25 + 2 \cdot \pi \cdot 5 \cdot 14 = 439.6$$

113.0 ft <sup>2</sup> A
25.1 in. <sup>2</sup> THE
35.6 m <sup>2</sup> STORE
201.0 m <sup>2</sup> TO
50.2 in. <sup>2</sup> SPENT
326.6 in. <sup>2</sup> ONE
187.4 cm <sup>2</sup> BUY
125.6 ft <sup>2</sup> TRYING
157 cm <sup>2</sup> WHO
251.2 cm <sup>2</sup> A
351.7 in. <sup>2</sup> NEW

100.48