



Logic

About These Problems

Logic problems involve making assumptions based on given information. The easiest way to maneuver logic problems is verifying the options given to you and determining which ones are false and which ones are true.

Question. If a circle has an area of 78.5, which of the following must be true?

- I. The radius of the circle is 5
- II. The circumference is 31.4
- III. The diameter is 15

- 1. I Only
- 2. II Only
- 3. III Only
- 4. I and II
- 5. I,II and II

Answer. 4: If the area is 78.5 then the radius must be

$$78.5 = \pi * r^2 \rightarrow r = 5$$

$$\text{circumference} = 2 * 5 * 3.14 \rightarrow 31.4$$

$$\text{diameter} = 2 * 5 \rightarrow 10$$