

1. I have a rectangular prism with sides 2, 6, and x . If the volume is at most 100 cm^3 , and the longest side of the rectangular prism must be a prime number, what is the largest value for x ?

- A. 5
- B. 7
- C. 8
- D. 9
- E. 11

2. Find the coordinates of a point that is on the line $y=8$ and is equidistant from $(2,6)$ and $(7,6)$

- A. $(6,8)$
- B. $(8,6)$
- C. $(4.5, 8)$
- D. $(4,8)$
- E. $(8,9)$

3. Find the slope of a line with an x -intercept of 6 and passes through $(12, 12)$

- A. -2
- B. $-1/2$
- C. 1
- D. $1/2$
- E. 2

4. The area of a triangle is 30 and it has an altitude of 6. If you use the base of the triangle as a diameter for drawing a semicircle, what would the area of the semicircle be to the nearest tenth?

- A. 19.6
- B. 24.7
- C. 39.3
- D. 51.5
- E. 78.5