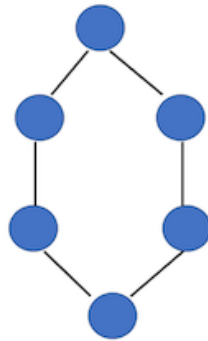


1. Suppose the graph $G=(V,E)$ is a 4-regular graph and $|V|=10$. Which of the following is $|E|$?

(3 points)

- A. 10
- ✓ B. 20
- C. 30
- D. 40

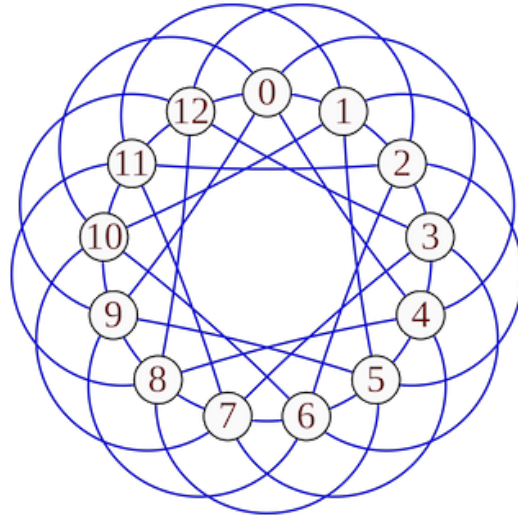
2. Suppose three **pendant** vertices are added to the 6-vertex graph below. What is the **maximum number** of vertices of **odd degree** that the resulting graph could have?



(3 points)

- A. 3
- B. 4
- C. 5
- ✓ D. 6

3. Consider the Paley graph $G=(V,E)$ of order 13 below:



Given that $|V|=13$, which of the following is the correct value for $|E|$?

(3 points)

- A. 26
- B. 36
- ✓ C. 39
- D. 48