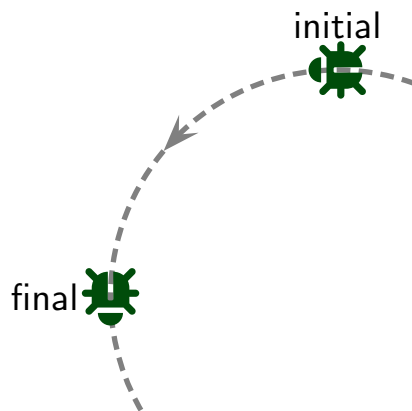


Question 1

A bug moves along a circular arc at a constant speed.

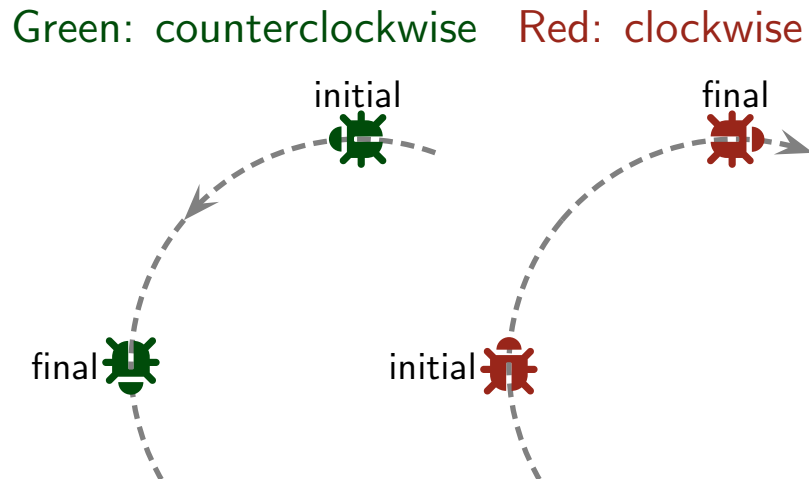


Which of the following is true about the average acceleration from the initial instant to the final instant as illustrated?










1. $\vec{a}_{av} = 0$
2. $\vec{a}_{av} \neq 0$ with direction \leftarrow
3. $\vec{a}_{av} \neq 0$ with direction \downarrow
4. $\vec{a}_{av} \neq 0$ with direction \searrow
5. $\vec{a}_{av} \neq 0$ with direction \swarrow

Question 2

Two bugs each move along a circular arc at a constant speed but in different directions.



Which of the following is true about the direction of the average acceleration from the initial instant to the final instant as illustrated?

1. Green  Red 
2. Green  Red 
3. Green  Red 
4. Green  Red 
5. Green  Red 