Activity 08 – Tiny House Thermal Loads - Summer

The Tiny House student club on campus is designing and building a house for personal use that minimizes building materials and energy impact. This Tiny House needs a heating and cooling system, and they know you can help them get started designing it. They need a cooling system to provide a comfortable average indoor air temperature during the heat of summer assuming typical Sacramento weather. The club needs to know what size system to purchase and how quickly the inside air can be cooled down assuming the worst case scenario.

Since space is limited, you propose a window mount air conditioning unit since it can double as the heater in the winter. After a little research on the internet, you determine that the best refrigeration cycles being sold operate at about 50% of an ideal refrigeration cycle.
Activity 08 – Tiny House Thermal Loads - Winter

The Tiny House student club on campus is designing and building a house for personal use that minimizes building materials and energy impact. This Tiny House needs a heating and cooling system, and they know you can help them get started designing it. They need a heating system to provide a comfortable average indoor air temperature during the cold of winter assuming typical Sacramento weather. The club needs to know what size system to purchase and how quickly the inside air can be cooled down assuming the worst case scenario.

Since space is limited, you propose a window mount air conditioning unit since it can double as the heater in the winter. After a little research on the internet, you determine that the best refrigeration cycles being sold operate at about 50% of an ideal refrigeration cycle.