

M2c

Suppose these five separate tasks must be completed from the time an airplane lands until it is ready to take off again:

Task A	Unload passengers	13 minutes
Task B	Unload cargo	25 minutes
Task C	Clean and refuel	15 minutes
Task D	Load new cargo	22 minutes
Task E	Load new passengers	27 minutes

Further suppose:

1. Passengers must be unloaded before cleaning and refueling.
2. Cargo must be unloaded and plane must be cleaned and refueled before loading new passengers.
3. Cargo must be unloaded before new cargo is loaded.

Assume you have as many workers as you need.

What is the shortest time it will take to prepare the plane to fly again?