

Problem of the Week Problem A Piling Wood

The Taylor family heats their home with wood. They recently got a large delivery of cut logs which were left in a pile on their driveway. Janelle and Alphonso carry logs from the pile and stack them in the woodshed. In one trip, Janelle can carry 4 logs at a time and Alphonso can carry 3 logs at a time. They each take the same amount of time to carry logs from the pile, stack them in the woodshed, and walk back to the pile.

- (a) If they each take as many logs as they can on each trip from the pile to the woodshed, how many logs have Janelle and Alphonso stacked after making 10 trips from the pile to the woodshed?
- (b) When Janelle and Alphonso started, there were 200 logs in the pile. How many trips from the pile to the woodshed do they have to take in order to move all the logs?
- (c) It takes approximately 30 seconds for Janelle and Alphonso to carry logs from the pile, stack them in the woodshed, and return to the pile. Approximately how many minutes does it take them to stack all of the logs in part (b)?
- (d) On the last trip, Janelle and Alphonso carry the same number of logs. If they each take as many logs as they can on their earlier trips, how many logs do they each carry on the last trip?

