



## 2 Let's Wrap It Up!

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### Challenge

In the days before Christmas, Santa's elves are working harder than ever. Wrapping paper is flying around in the wrapping room; tape is sticking to every surface imaginable. Unwrapped gifts are piled up on one side of the massive wrapping room, towering over all elves that are frantically cutting, taping, wrapping...

Between the rolls of lint and tape dispensers, there is an alarm sitting on one of the elves' desks. The alarm is counting down the hours they have left to wrap all the presents. Right now, only 10 hours are left... And the pile of presents? It contains 350 presents! Will the elves manage to wrap all presents in time?

There are 8 elves wrapping: Anna, Bea, Candice, Dan, and Eddy immediately start wrapping. Anna and Candice are experienced wrappers, each wrapping 10 presents per hour! Bea and Eddy are a bit slower and can only pack 7 presents per hour, and Dan wraps 3 per hour. After 2 hours of wrapping, Fince comes to help them out, but he can only wrap 6 presents per hour. When there are only 4 hours left on the alarm clock, Candice and Fince need to leave. With 2 hours on the clock, Geoffrey and Hugh come to help out. They can wrap 4 (Geoffrey) and 5 (Hugh) presents per hour, respectively. At the same time, Bea leaves and Fince comes back. Will there be any unwrapped presents left when the time on the alarm clock ends?

**Possible answers:**

1. Yes, the elves ran out of time and there are exactly 50 unwrapped presents left!
2. Yes, the elves ran out of time and there are exactly 40 unwrapped presents left!
3. Yes, the elves ran out of time and there are exactly 30 unwrapped presents left!
4. Yes, the elves ran out of time and there are exactly 20 unwrapped presents left!
5. Yes, the elves ran out of time and there are exactly 10 unwrapped presents left!
6. No, the elves finished wrapping all the presents exactly in time!
7. No, the elves finished wrapping all the presents in time and could have even wrapped 10 extra presents, but no more!
8. No, the elves finished wrapping all the presents in time and could have even wrapped 20 extra presents, but no more!
9. No, the elves finished wrapping all the presents in time and could have even wrapped 30 extra presents, but no more!
10. No, the elves finished wrapping all the presents in time and could have even wrapped 40 extra presents, but no more!