

Criterion D – Practice Group Task

On Dec.15, a ski resort opens for the winter season. In December, to attract more visitors, the resort provides free coach buses from the nearby city, with 15 identical buses arriving every 10 minutes, starting at 8:10. All other visitors arrived by car before 8:00. In January and February, the promotional bus service stops and all visitors arrive by car.



At the end of February, they close the resort and provide you with the limited data below. Based on this data, they would like to know their **total number of visitors for December, January, and February**. Support all your calculations using the sequences formulas.

Provided data:

- Dec.15:

785 skiers at the resort after bus 7 has arrived and 920 skiers at the resort after bus 12 has arrived.

- throughout December, the car arrivals increase by 56 per day whilst the number arriving by bus remain the same

- Over the course of January and February, the approximate number of total visitors per day to the resort increases geometrically

- On Jan.19, there were 2135 visitors and on Feb.4, there were 2817 visitors.

