MCj03610400000[1]IB Math SL

*Activity*

Let’s go for a Walk

Marie is training for the Three Day Cancer walk. On the first day she walks 3 miles. On the 2nd day she walks 5 miles, on the 3rd day she walks 7 miles, each day walking 2 miles more than the previous day.

1. Make up a table that represents this situation for the first six days.
2. How far will she walk on the 6th day?
3. Write a model to predict Marie’s distance for each day if she continues this pattern.
4. Using your model, predict how far Marie will walk on the 10th day.
5. What is the total distance Marie will walk during the first 6 days? What was her average distance per day?
6. Marie walked a total of 16 miles on two given days. Using your table from problem 1, on which days did this happen? Is there more than one pair of two days that this happens? If so, on which pairs of days did this occur?
7. If you only know the distance she walked on the 1st and 6th days in this pattern, could you find the total distance she walked by day 6? Explain your answer.
8. What is the total distance Marie will walk during the first 10 days?
9. If you only know the distance she walked on the 1st and 10th days in this pattern, could you find the total distance she walked during the first 10 days? Explain your answer.
10. If you only know the distance she walked on the 1st and 16th days in this pattern, could you find the total distance she walked during the first 16 days? Explain your answer.
11. Could you write a formula for the total distance she will have walked on the first 30 days?