

Question:

Dana can run at a rate of speed four times faster than she can walk but she can skip at a rate of speed that is half as fast as she can run. If she can skip at 3 miles per hour how many miles can she travel in six hours if she spends one-third of the time running and two-thirds of the time walking?

Reasoning + Answer:

<think> First find the Dana's rate of speed while running : $3 \text{ miles per hour} * 2 = 6 \text{ miles per hour}$
Then find the distance she runs in six hours : $6 \text{ miles per hour} * \frac{1}{3} * 6 \text{ hours} = 12 \text{ miles}$ Then
find her speed while walking : $6 \text{ miles per hour} / 4 = 1.5 \text{ miles per hour}$ Then find the distance she
walks in six hours : $1.5 \text{ miles per hour} * (\frac{2}{3}) * 6 \text{ hours} = 6 \text{ miles}$ Then add the distances she
ran , skipped , and walked to find the total distance : $12 \text{ miles} + 6 \text{ miles} + 0 \text{ miles} = 18 \text{ miles}$ </
think> <answer>18</answer>