

Answer on Question #84865 – Math – Algebra

Question

There were 75 runners to start a race. In the first half of the race, $\frac{2}{5}$ of them dropped out. In the second half of the race, $\frac{1}{3}$ of the remaining runners dropped out. How many runners finished the race?

Solution

Step 1:

The sentence 'In the first half of the race, $\frac{2}{5}$ of them dropped out' means that $75 \times \frac{2}{5} = 30$ people dropping out during the first half. Thus, $75 - 30 = 45$ people were still running.

Step 2:

The sentence 'The second half of the race, $\frac{1}{3}$ of the remaining runners dropped out' means that $45 \times \frac{1}{3} = 15$ people dropping out during the second half. Thus, $45 - 15 = 30$ people finished the race.

Answer: 30 runners finished the race.