## Andres' Dilemma ${ }^{1}$

By Louise Martinez-Ortiz

Andres is a great basketball player. However, since AAU basketball ended in August he has been playing a lot of video games and watching a lot of television. He regrets that he has not exercised or practiced basketball much during the last three months.


Andres found out there will be a tournament on November 1. He decided to be has best for the tournament. However, he only has 15 days to get back in shape. He decides to improve his running in the next 15 days by working hard using Stride Drills!

Stride Drills are running drills made up of several $20-35$ second sprints that are used to improve running form and lengthen the distance of individual strides (steps). The purpose of Stride Drills is not to get in a hard workout, or to have you breathing hard. They are used to improve speed and mechanics. So, starting the next Stride Drill when you are winded or before being fully recovered from the last drill is not a good idea. The Stride Drills require Andres to run $20-35$ second sprints at $85 \%$ or $95 \%$ effort.

Andres writes down the following training plan with a GOAL of improving his running form and increasing the length of his individual strides from 50 to 100 centimeters.

Step 1: Warm up by first walking 3-5 minutes and then running slowly for 5-10 minutes.
Step 2: Begin a Stride Drill by easing into a fast pace over the first 5 seconds. To prevent injury, do not explode super-fast out of the gate.

Step 3: Reach full speed by the end of 5 seconds. Focus on staying relaxed and letting my body do the work. Keep a relaxed face, make sure my arms aren't flailing, and work on landing on my midfoot (closer to my toes), not on my heel. Stretch out the length of each stride. Continue to stay relaxed at my top end speed and gradually, over the last few seconds slow to a stop.

Step 4: After each run, stretch lightly for 3-5 minutes. Focus on any part of my body that was tight during the run and identify any problem area that hurts or feels strained.

Step 5: Take a full recovery of at least 2 minutes between each Stride Drill. Then stop and catch my breath by walking or slowly jogging. Repeat another Stride Drill starting at Step 2 above.

How much work do you think Andres needs to do to make big improvements?

Is it important to have a goal in order to achieve something?

How long is 100 centimeters ( 1 meter)? Measure 100 centimeters and 3 feet out on the floor. Which is longer and by about how much?

Find the Increase in Stride Length and Percent Improvement:

| Original Average <br> Stride Length | Improved Stride Length <br> After Training for 15 Days | Increase in Stride <br> Length | Percent <br> Improvement |
| :--- | :--- | :--- | :--- |
| 50 centimeters | 60 centimeters |  |  |
| 50 cm | 75 cm |  |  |
| 50 cm | 100 cm |  |  |

Do you think Andres can improve his stride length to 100 cm in 15 days?

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[^0]:    ${ }^{1}$ Suggested Grades: 4-6 Skills: Identifying what might be possible, measurement and percent increase.

