

## Shall We Ride or Walk?

## Problem-of-the-Week

### The Problem

A bus with 12 basketball players broke down in a town 20 miles from its destination. The coach's car was available but could carry only 4 players at a time. Also, it could travel only 20 miles per hour because of the traffic. The players said they could walk at 4 miles per hour when they were not riding. Suppose the coach took 4 of them part way, came back for 4 more and took them part way, and then came back for the last 4. How could they all get to their scheduled basketball game at the same time?



### Strategies and Hints

1. Draw a diagram.
2. Work an easier problem where the coach's car can take  $\frac{1}{2}$  of the players at a time, the distance is closer, and the players can walk  $\frac{1}{2}$  as fast as the car can travel.
3. Don't forget the time for the return trips of the car.