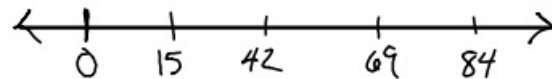
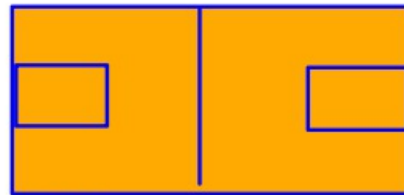


•During a “suicide” athletes start at one end of the gym, sprint to the foul line (15 feet), then back to the end-line, then sprint to the mid-court line (42 feet), then back to the initial end-line, then sprint to the other foul line, then back to the initial end-line, then sprint to the opposite end line, where they are finished. Determine the distance and displacement for each athlete. A diagram of the court would be useful!



$d = ?$ $d = \text{total path traveled}$

$$d = 15 + 15 + 42 + 42 + 69 + 69 + 84$$

$$d = 336 \text{ ft}$$

$\Delta x = ?$

$$\Delta x = x_f - x_i = 84 - 0 = 84 \text{ ft}$$

Now, You do this problem:

Use the diagram to determine the distance and displacement of the skier between positions A and D.

