

Section 3.2b

1) What makes the diagrams in Figure 3-6 a Particle Model?

a) Draw a Particle Model for a person walking at a constant speed.

2) How does a Coordinate System add to your motion diagram to make it more specific?

a) Draw a Particle Model for a person speeding up from rest going right.

b) Draw a Particle Model for a person speeding up from a constant speed going right.

c) Draw a Position Vector for b and c for the third time interval.

3) It is 200. M to the water tower from our classroom. State this as a scalar and vector quantity.

What is different about the two?

4) Draw a particle model with a coordinate system for a person starting from rest and traveling 1.0 m during the first time interval, then 3.0 m during the second time interval and then 5.0 m during the third. Start the origin at the left.

a) Draw the displacement of the person during the third time interval.

b) Now make the origin at the right. Redraw the displacement.