

Name: Saleena Jian

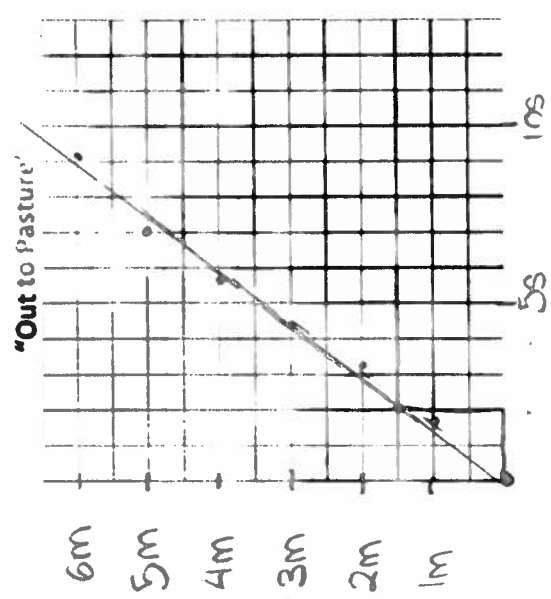
Section 2.3: Position and Velocity Graphs
(Bossy the Cow)

In this activity, we look at *uniform motion*, that is, motion with constant velocity.

Velocity is a vector, so in order for it to be constant, both its magnitude and direction must be constant.

"Out to Pasture"		"Out to Hereford"		"Big Bad Wolf"	
Position (m)	Time (s)	Position (m)	Time (s)	Position (m)	Time (s)
0	0s	0	0s	0	0s
1	1.7s	1	0.88s	1	0.73s
2	3.2s	2	1.86s	2	1.51s
3	4.4s	3	2.40s	3	2.56s
4	5.6s	4	2.97s	4	3.50s
5	7s	5	3.86s	5	4.16s
6	9.1s	6	4.69s	6	4.98s
				5	5.49s
				4	6.14s
				3	
				2	7.23s
				1	7.45s
				0	

Below, draw position-time graphs for Bossy's adventures. Remember, these graphs are not pictures of Bossy's path!

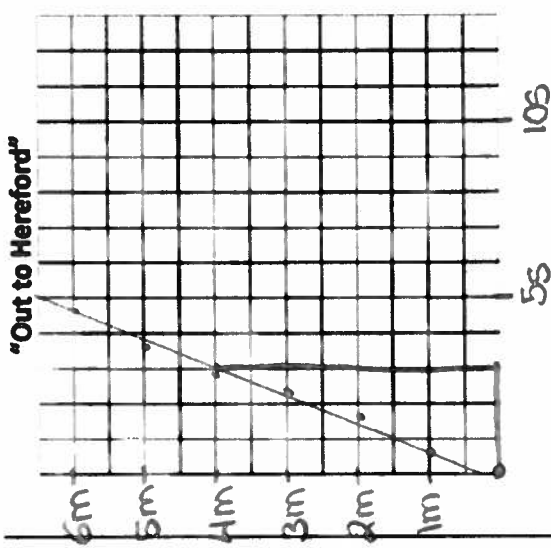


What's the slope of your line above?

$$\frac{1.5}{2} = 0.75 \text{ m/s}$$

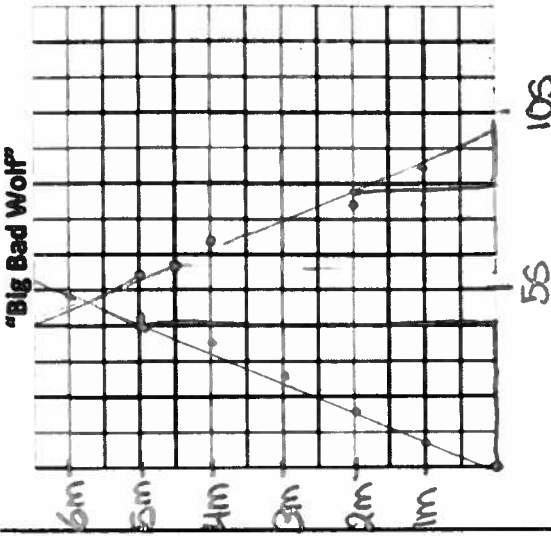
What are the units of the slope?

m/s



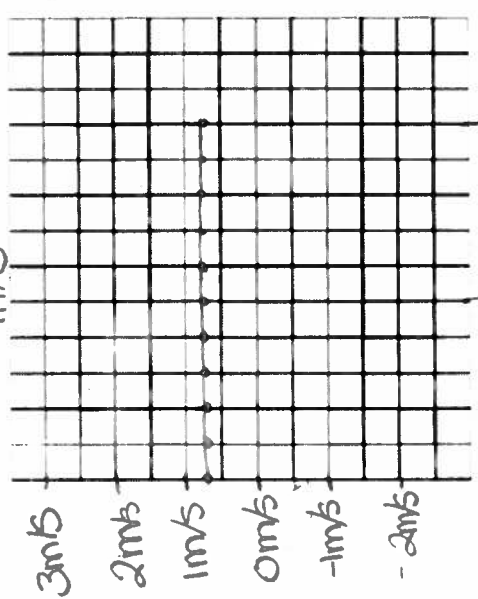
What's the slope of your line above?

$$\frac{4}{3} \text{ m/s} = 1.33 \text{ m/s}$$



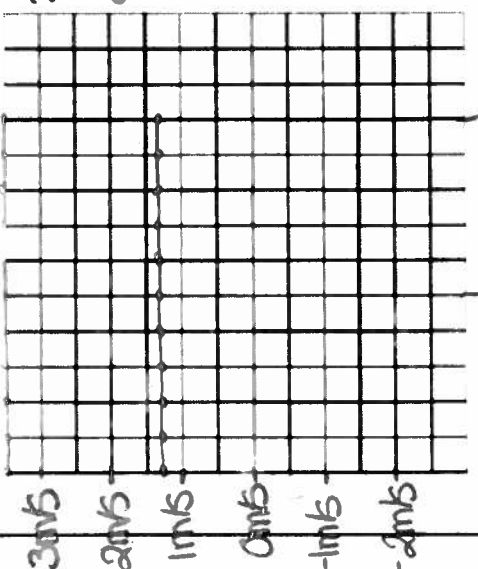
What are the slopes of your lines above?

$$\textcircled{1} \frac{5}{2.5} = 2 \text{ m/s}$$



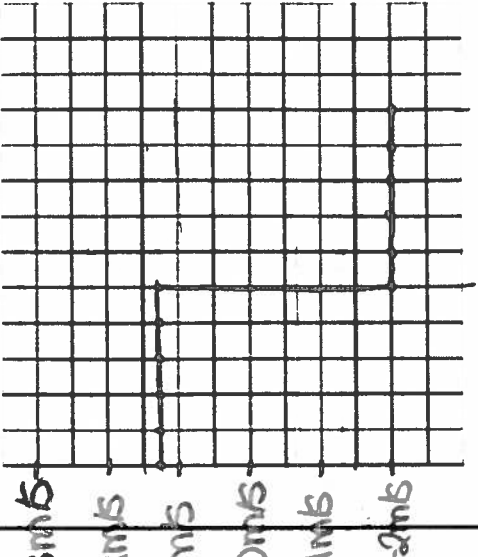
Is this uniform motion? Why or why not?

uniform, because Bossy is travelling at a constant velocity



Is this uniform motion? Why or why not?

uniform, because Bossy is travelling at a constant velocity



Is this uniform motion? Why or why not?

No, because Bossy's velocity changed when she ran