Introduction

I saw an insect walking along the hallway in Building 76 this morning. "How fast is it moving?" I wondered. In this experiment, the speed of the insect will be determined using simple instruments.

1 Observations

I marked the hallway with pieces of tape, using a ruler to place each piece 5 cm from the previous one. Each time the insect's forelegs reached a piece of tape, I noted the time with a hand-operated stopwatch.

Progress of the insect

Position (cm)	Time (sec)
0	0.0
5	3.1
10	5.9
15	8.6
20	12.2

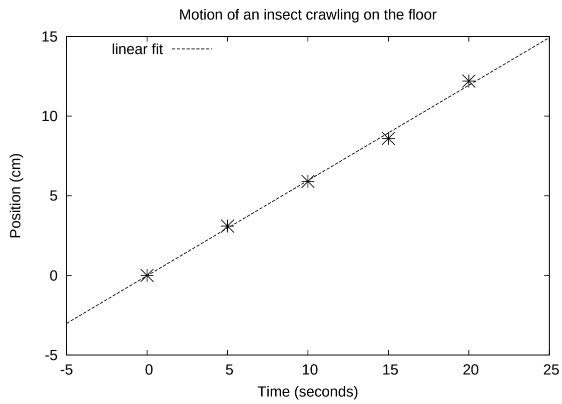

Figure 1: Figure 1: Motion of an insect

2 Analysis

A linear fit to the measurements yields

$$x = (0.598 \pm 0.05 \text{ cm/s})t - 0.02 \text{ cm} \qquad (1)$$

where x is the position of the insect and t the time.

3 Conclusion

This insect doesn't walk as fast as a human.