

## QUIZ #2 September 13, 2006

The following table represents the total distance my cat, Cheeto, had walked at various times from 0 to 13 seconds. You may assume that Cheeto walked at a constant speed between each of the times listed in this table.

Elapsed Time (sec)	Total Distance (ft)	Elapsed Time (sec)	Total Distance (ft)
0	0	8	47
1	4	9	56
2	8	10	61
5	20	11	66
6	29	13	76

- 1) Explain what the row 8, 47 represents:
- 2) Cheeto changed his walking speeds at several times. When did he change speeds?
- 3) Using the table above, determine approximately how fast (ft/sec) Cheeto walked.

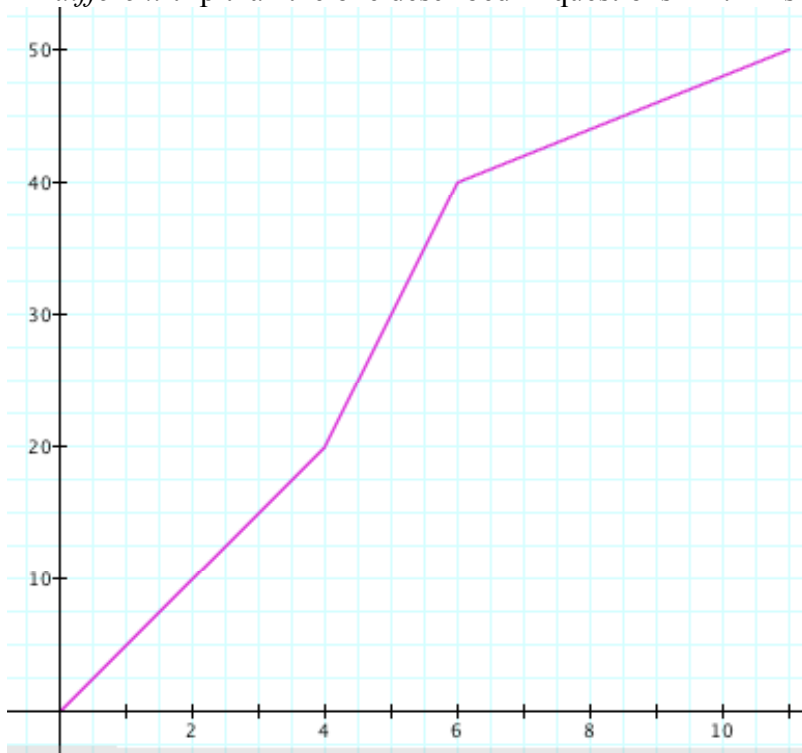
<i>Starting at</i>	<i>Ending at</i>	<i>Cheeto walked at</i>
<u>  0  </u> sec	<u>  5  </u> sec	_____ ft/sec
<u>  5  </u> sec	<u>  9  </u> sec	_____ ft/sec
<u>  9  </u> sec	<u> 13 </u> sec	_____ ft/sec

- 4) Using the speeds you determined in part 2, write expressions that represent the TOTAL distance Cheeto had traveled in  $x$  seconds,  $0 \leq x \leq 13$

<i>When <math>x</math> is greater than</i>	<i>But less than</i>	<i>Cheeto had walked this many feet in <math>x</math> seconds</i>
<u>  0  </u> sec	<u>  5  </u> sec	_____ ft
<u>  5  </u> sec	<u>  9  </u> sec	_____ ft
<u>  9  </u> sec	<u> 13 </u> sec	_____ ft

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5) The following pixie dust record represents Cheeto's total distance over the course of a *different* trip than the one described in questions 1-4. This trip lasted 11 seconds..



a. At what speeds did Cheeto walk and over what intervals did he walk that speed?

From \_\_\_\_ seconds to \_\_\_\_ seconds Cheeto walked \_\_\_\_\_ ft/sec.

From \_\_\_\_ seconds to \_\_\_\_ seconds Cheeto walked \_\_\_\_\_ ft/sec.

From \_\_\_\_ seconds to \_\_\_\_ seconds Cheeto walked \_\_\_\_\_ ft/sec.

From \_\_\_\_ seconds to \_\_\_\_ seconds Cheeto walked \_\_\_\_\_ ft/sec.

b. Write expressions that will give the total distance Cheeto had walked in  $x$  seconds for each part of his walk.

*When  $x$  is greater than*

*But less than*

*Cheeto had walked this many feet in  $x$  seconds*

\_\_\_\_ sec

\_\_\_\_ sec

\_\_\_\_\_ ft

\_\_\_\_ sec

\_\_\_\_ sec

\_\_\_\_\_ ft

\_\_\_\_ sec

\_\_\_\_ sec

\_\_\_\_\_ ft