



R10 – THE RUNNING GAME

Go to student.desmos.com, get the class password from your teacher, and do the Desmos activity called The Running Game.

<p>1. If Sam can run at a pace of 7 minutes 21 seconds (7:21) per mile on average, how long would it take him to run 4 miles at that pace?</p> <p style="text-align: center; color: red;">$28 \text{ min} + 84 \text{ sec} = 29:24$</p>	<p>2. Kim ran 3 miles in 30:04. What was her average pace per mile?</p> <p style="text-align: center; color: red;">$10:08 \text{ per mile}$</p>
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3. Amet ran 5 miles in 39 minutes. He ran each mile at a different pace, but each mile was within 1 minute of the mile before it and the mile after it.

Answers may vary for the entire problem.

a. Write reasonable times for each mile in the table.

Mile #	1	2	3	4	5
Time	7	8	9	8	7

b. Make a new table to record total time at each mile.

Distance in miles	1	2	3	4	5
Time in minutes	8	15	24	32	39

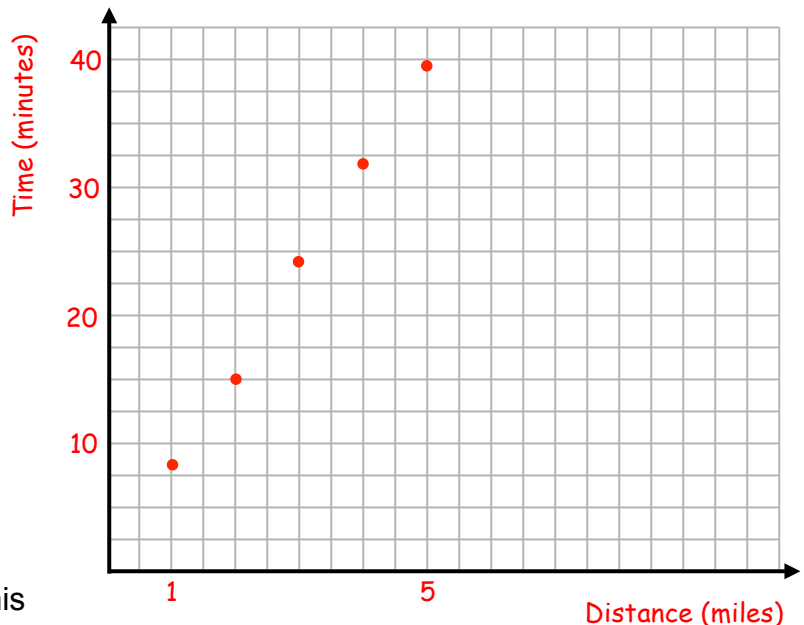
c. Graph the data in part b above. Label and scale your graph appropriately.

d. Write a reasonable ordered pair to fit this graph:

(6, 47)

Explain what this ordered pair means in the context of the problem.

Amet runs 6 miles in 47 minutes.



e. Find a value that approximates this equation:

Time in minutes = 7.8 • distance in miles

Let t = time and d = distance, and rewrite the equation above: $t = 7.8d$