

Graphing Change Over Time

NCTM Standards 2, 3, 4, 5, 6, 7, 8, 9, 10

- 1 Mr. Kim drove on the highway at 60 miles per hour. How far had he gone at each time?

START 20 miles _____ miles _____ miles _____ miles _____ miles

3:00 _____ _____ _____ _____ _____

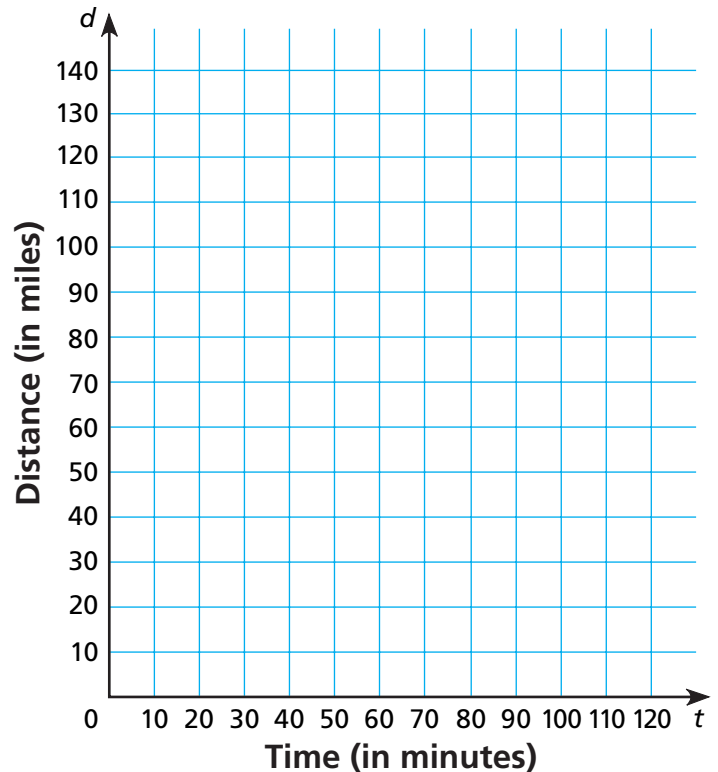
- 2 How much time did it take him to drive 40 miles? _____

- 3 Graph Mr. Kim's travel times and distances.

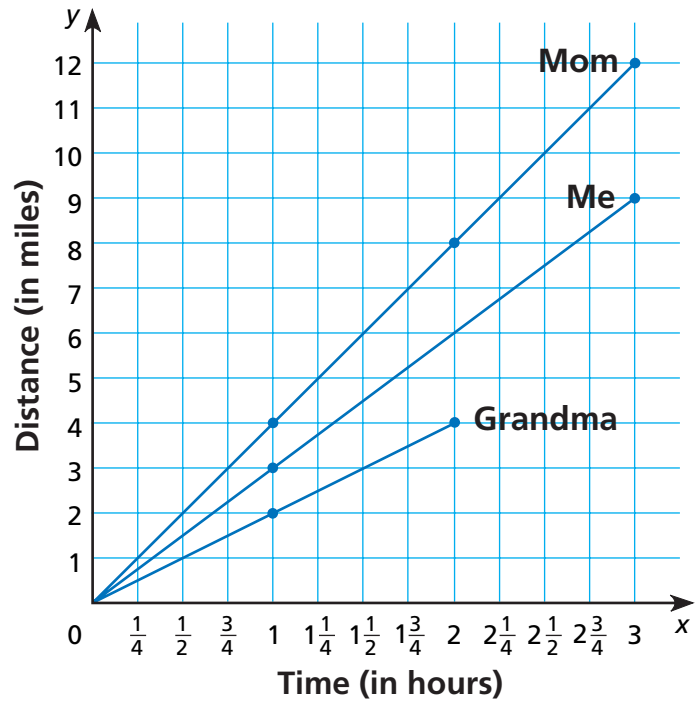
- 4 If he kept driving at the same speed, how far would he have gone 2 hours after he started?

- 5 How far had he traveled 30 minutes after starting?

MR. KIM'S TRIP



SUNDAY WALKS



Sabra, her mother, and her grandmother each took a walk on Sunday. None of them changed speed for the whole walk. They recorded how far they walked and how long it took. Afterward, Sabra made this graph.

Use the graph to answer these questions. If you do not have enough information to answer a question, write "cannot tell."

- 6 Who walked farthest? _____
- 7 Who spent more time walking, Sabra or her grandmother? _____
- 8 Who went farther in two hours, Sabra or her mother? _____
- 9 Did they all start at the same time? _____
- 10 Who stopped walking first? _____
- 11 What was Sabra's speed? _____
- 12 Who walked slowest? _____

13 Challenge Sabra's sister walked 5 miles per hour for two hours. Add a line to the graph for Sabra's sister.