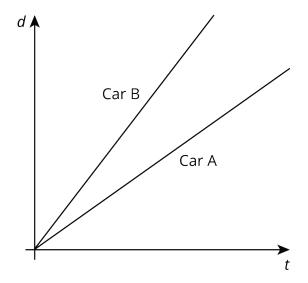
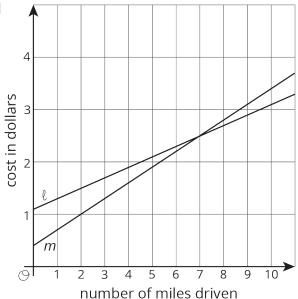


Lesson 8 Practice Problems

1. Two cars drive on the same highway in the same direction. The graphs show the distance, *d*, of each one as a function of time, *t*. Which car drives faster? Explain how you know.

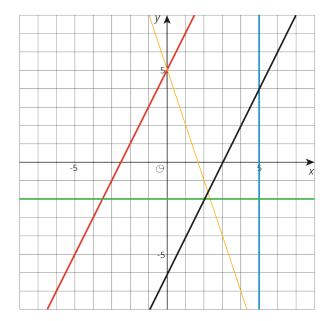


- 2. Two car services offer to pick you up and take you to your destination. Service A charges 40 cents to pick you up and 30 cents for each mile of your trip. Service B charges \$1.10 to pick you up and charges c cents for each mile of your trip.
 - a. Match the services to the Lines ℓ and m.
 - b. For Service B, is the additional charge per mile greater or less than 30 cents per mile of the trip?Explain your reasoning.





- 3. Kiran and Clare like to race each other home from school. They run at the same speed, but Kiran's house is slightly closer to school than Clare's house. On a graph, their distance from their homes in meters is a function of the time from when they begin the race in seconds.
 - a. As you read the graphs left to right, would the lines go up or down?
 - b. What is different about the lines representing Kiran's run and Clare's run?
 - c. What is the same about the lines representing Kiran's run and Clare's run?
- 4. Write an equation for each line.



(From Unit 5, Lesson 9.)