

19. Heather and her friends take a taxi to a Great Big Sea concert.

- The taxi meter starts at \$2.50.
- Each kilometre driven costs \$2.00.
- Heather pays \$31.50 for the taxi ride.

How far did the taxi travel?

- Draw a graph. Use it to estimate the solution. Check the accuracy of your estimate.
 - Explain why the equation $31.50 = 2.5 + 2d$ accurately represents this problem.
 - Describe a method you can use to get an exact solution.
20. Lakshmi and Vasim are having a party to celebrate their daughter's success in the kayaking event at the Canada Games. A DJ for the party charges \$200 plus \$50 per hour.
- Write the equation that represents this relationship.
 - For how long will the DJ play for \$525?

21. Sonia signed a contract with a recording company. She receives \$10 000 cash on signing and \$2.00 for each CD sold.

- Suppose Sonia's CD sold 50 000 copies. How much will she earn?
- Find the number of CDs sold if she earns \$40 000.



22. Craig signed a contract with a different CD company. He gets no signing bonus and \$2.50 for each CD sold.

- Describe the domain and range.
- Suppose Craig's CD sold 50 000 copies. How much will he earn?
- Find the number of CDs sold if he earns \$40 000.

23. A taxi company charges a basic fee of \$5 plus \$0.30 per kilometre travelled.

- What is the dependent variable? What is the independent variable?
- Describe the domain and range.
- What is the distance traveled for a charge of \$32?

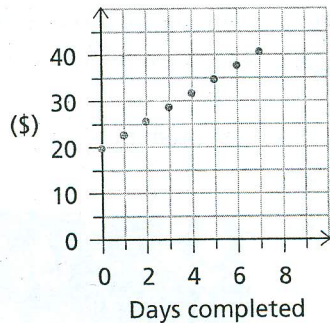
24. Another taxi company charges a basic fee of \$3 and \$0.50 per kilometre.

- What is the distance traveled for a ride that costs \$32?
- Is this taxi company more expensive or less expensive than the one in Question 23 for a ride of 15 km? For a ride from your house to school?

25. The following graphs represent possible situations modeled by equations.

- Describe a situation that each graph could represent.
- Make up a problem based on the situation. Have others solve your problem.
- Explain why it does or does not make sense to extend the graph beyond the values provided.

A



B

