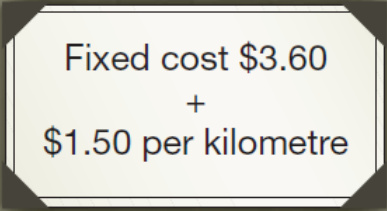


Example 2 Writing an Equation to Represent an Oral Pattern

I called Kelly's Cabs. The cost of a ride is shown on a poster in the cab.



Fixed cost \$3.60
+
\$1.50 per kilometre

- Write an expression for the fare in terms of the fixed cost and the cost per kilometre.
- Write an equation that relates the fare to the distance travelled.
- What is the fare for an 11-km ride?

A Solution

- The fare is \$3.60, plus \$1.50 per kilometre.

That is, the fare is $3.60 + 1.50 \times (\text{distance in kilometres})$.

Let d represent the distance in kilometres.

So, an expression for the fare is: $3.60 + 1.50 \times d$, or $3.60 + 1.50d$

- Let F represent the fare in dollars.

Then, an equation that relates F and d is: $F = 3.60 + 1.50d$

- To determine the cost for an 11-km trip, use the equation: $F = 3.60 + 1.50d$

Substitute: $d = 11$

$$F = 3.60 + 1.50(11)$$

$$= 3.60 + 16.50$$

$$= 20.10$$

The fare for an 11-km ride is \$20.10.

4.1

Writing Equations to Describe Patterns

Practice

Page 159 #s 4-9, 11, 12, 14, 15

Math Challenge Approaching!!



Can you find the pattern??

n	t
1	1
2	2
3	6
4	24
5	120
6	720

When you see it don't tell anyone!!