Grade 9 Mathematics Worksheet

Ratio, rate and proportion2

Questions:

1. As a tourist you need to be able to understand how to do conversions. You are visiting the United States of America and want to hire a car. You are given the following advertisement by the hotel:

	THE ONE CAR STOP	
The best prices under the sun this holiday Up to 175 miles free of charge	Rental per day	$47
	Cost per mile >175	$0,36

You know that now $1 = R8,25 and that 1km = 0,62137 miles.

a) You want to travel from New York to Washington DC which is 225 miles apart. How much will you pay in dollars for this trip?

b) How much, in Rand, will this amount in (a) be?

c) Write down an equation that will give you the cost in dollars for a journey of x miles long where x is the distance that you travelled more than 175miles.

Solution

1. a) Miles that you will travel over 175: 225 – 175 = 50 miles. So the car rental will be $47 and the miles cost will be 50 x $0,36. Thus the total in dollars will be:
        $$47 + 50 \times 0,36 = \$65$$

    b) $65 \times 8,25 = R536,25$.

    c) $C = 47 + 0,36x$ for one day. For *y* days and *x* miles over 175 miles your cost becomes $C = 47y + 0,36x$.

Learners can be asked to use their function they created to check answers that can be found by doing simple calculations.