Question

Which of the following mobile networks has a better offer? Justify you answer.

World Celcom: Php 500 monthly charge. Free calls and texts to World Celcom subscribers. Php 6.50 per minute of call to other networks.

Smartlink: Php 650 monthly charge. Free calls and texts to Smartlink subscribers. Php 5 per minute of call to other networks.

Solution

We need to write the equation of dependence charge for mobile communication from the payment of minute of call to other networks.

The equation for the World Celcom mobile network:

variable costs – 6.5x per minute; fixed costs – Php 500;

y=6.5x+500;

The equation for the Smartlink mobile network:

variable costs – 5x per minute; fixed costs – Php 650;

y=5x+650;

Now we solve this system of equation

y=6.5x+500

y=5x+650

6.5x+500=5x+650

1.5x=150

x=100

If we call more then 100 minute to other networks monthly it is better to use Smartlink mobile network because total payment will be less. And if we speak less then 100 minute of call to other networks monthly it is better to use World Celcom mobile network because total payment will be less.