**UNIT:Equations in Two Variables**

**LEARNING TARGET: Equations in *y* = *mx* Form**





 **Tom was comparing computer repair companies. The cost *y* for Computer Access for *x* hours is shown in the graph. The cost for Computers R Us can be represented by the equation *y* = 23.5*x*. Which company’s repair price is lower? Explain.**

 Compare the rates of change.

 Computers R Us: *y* = 23.5*x*; The unit rate is $23.50 per hour.

 Computer Access: The slope of the graph is or $25 per hour.

 Since 23.5 < 25, Computers R Us has the lower repair price.



 **The number of centimeters varies directly with the number of inches. Find the measure of an object in centimeters if it is 50 inches long.
**Write an equation of direct variation. Let *x* represent the measure of the object in inches and let *y* represent the measure of the object in centimeters.



Use the equation to find *y* when *x* = 50.



So, the object is 127 centimeters long.