

1. Richards' Yoga Center has done some research and found that their income, I , can be written as a function of the number of floor mats sold, n . Let $I(n) = 11n - 3$.
2. Richards' Restaurant has done some research and found that their profit, P , can be written as a function of the number of meals sold, n . Let $P(n) = 3n + 2$.
3. Tom's Fish Store has done some research and found that their cost, C , can be written as a function of the number of fish hooks made, n . Let $C(n) = 8n + 9$.
4. Tom's Pool Company has done some research and found that their income, I , can be written as a function of the number of inground pools sold, n . If $I(n) = 6n + 6$.
5. Laurie's Yoga Center has done some research and found that their profit, P , can be written as a function of the number of floor mats sold, n . Let $P(n) = n + 9$.
6. Mary's Tire Company has done some research and found that their cost, C , can be written as a function of the number of tires made, n . Let $C(n) = 2n + 9$.
7. Tom's Awning Retailer has done some research and found that their profit, P , can be written as a function of the number of awnings sold, n . Let $P(n) = 10n - 8$.
8. A small-appliance manufacturer finds that if he produces x toaster ovens in a month his production cost is given by the equation $y = 6x + 3000$ (where y is measured in dollars). What do the slope and vertical intercept of the line represent?
9. The manager of a week-end flea market knows from past experiences that if she charges x dollars for a rental space at the flea market, then the number y of spaces she can rent is given by the equation $y = 200 - 4x$. What do the slope and y -intercept of the graph represent?
10. Some scientists believe that the average surface temperature of the world has been rising steadily. The average surface temperature is given by $T = 0.02t + 8.50$ where T is temperature in $^{\circ}\text{C}$ and t is years since 1900. What do the slope and vertical intercept represent? Use the equation to predict the average global surface temperature in 2100.

1. Richards' Yoga Center has done some research and found that their income, I , can be written as a function of the number of floor mats sold, n . Let $I(n) = 11n - 3$.
2. Richards' Restaurant has done some research and found that their profit, P , can be written as a function of the number of meals sold, n . Let $P(n) = 3n + 2$.
3. Tom's Fish Store has done some research and found that their cost, C , can be written as a function of the number of fish hooks made, n . Let $C(n) = 8n + 9$.
4. Tom's Pool Company has done some research and found that their income, I , can be written as a function of the number of inground pools sold, n . If $I(n) = 6n + 6$.
5. Laurie's Yoga Center has done some research and found that their profit, P , can be written as a function of the number of floor mats sold, n . Let $P(n) = n + 9$.
6. Mary's Tire Company has done some research and found that their cost, C , can be written as a function of the number of tires made, n . Let $C(n) = 2n + 9$.
7. Tom's Awning Retailer has done some research and found that their profit, P , can be written as a function of the number of awnings sold, n . Let $P(n) = 10n - 8$.
8. A small-appliance manufacturer finds that if he produces x toaster ovens in a month his production cost is given by the equation $y = 6x + 3000$ (where y is measured in dollars). What do the slope and vertical intercept of the line represent?
9. The manager of a week-end flea market knows from past experiences that if she charges x dollars for a rental space at the flea market, then the number y of spaces she can rent is given by the equation $y = 200 - 4x$. What do the slope and y -intercept of the graph represent?
10. Some scientists believe that the average surface temperature of the world has been rising steadily. The average surface temperature is given by $T = 0.02t + 8.50$ where T is temperature in $^{\circ}\text{C}$ and t is years since 1900. What do the slope and vertical intercept represent? Use the equation to predict the average global surface temperature in 2100.