55. CABLE TELEVISION In 1994, the average monthly cost for expanded basic cable television service was $\$ 21.62$. In 2004, this cost had increased to $\$ 38.23$. Write a linear equation that models the monthly cost as a function of the number of years since 1994. Predict the average monthly cost of expanded basic cable television service in 2010.
56. TIRE PRESSURE Automobile tire pressure increases about 1 psi (pound per square inch) for each $10^{\circ} \mathrm{F}$ increase in air temperature. At an air temperature of $55^{\circ} \mathrm{F}$, a tire's pressure is 30 psi . Write an equation that models the tire's pressure as a function of air temperature.
57. MULTIPLE REPRESENTATIONS Your class wants to make a rectangular spirit display, and has 24 feet of decorative border to enclose the display
a. Writing an Equation Write an equation in standard form relating the possible lengths $\ell$ and widths $w$ of the display.

b. Drawing a Graph Graph the equation from part (a).
c. Making a Table Make a table of at least five possible pairs of dimensions for the display.
58. CHALLENGE You are participating in a dance-a-thon to raise money for a class trip. Donors can pledge an amount of money for each hour you dance, a fixed amount of money that does not depend on how long you dance, or both. The table shows the amounts pledged by four donors. Write an equation that models the total amount $y$ of money you will raise from the donors if you dance for $x$ hours.

| Donor | Hourly <br> amount | Fixed <br> amount |
| :---: | :---: | :---: |
| Clare | $\$ 4$ | $\$ 15$ |
| Emilia | $\$ 8$ | None |
| Julio | None | $\$ 35$ |
| Max | $\$ 3$ | $\$ 20$ |

## REVIEW

Skills Review Handbook p. 998; TAKS Workbook

REVIEW TAKS Preparation p. 408;

TAKS Workbook
59. TAKS PRACTICE At the end of the week, John has $\$ 180$ in his bank account. During the week he withdrew $\$ 30$ for lunches, deposited a $\$ 125$ paycheck, and withdrew $\$ 22$ to buy a shirt. How much money did John have in his account at the beginning of the week? TAKS Obj. 10
(A) $\$ 95$
(B) $\$ 100$
(C) $\$ 107$
(D) $\$ 117$
60. taKS PRACTICE Use the table to determine the expression that best represents the total measure of the interior angles of any convex polygon having $n$ sides. TAKS Obj. 6

| Number of sides, $\boldsymbol{n}$ | 3 | 4 | 5 | 6 | 7 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total measure of interior <br> angles (in degrees) | 180 | 360 | 540 | 720 | 900 |

(F) $90(n-1)$
(G) $180(n-2)$
(H) $360(n-3)$
(J) $\frac{360}{n-1}$

