## Extending Concepts

DATA
19. Equal-Payment Plan From May through March, on an equal-payment plan, you pay $\$ 90$ each month on your electric bill.
a. How much do you owe in April?
b. Interpret your answer to part (a).
c. What should you pay each month to have 12 equal monthly payments?
20. Ink Cartridge A combo pack has

Actual Monthly Electric Usage
 $2^{3}$ ink cartridges. A shipment has $6^{2}$ combo packs. Which of the following keystroke sequences is better for finding the total number of ink cartridges in a shipment? Explain your reasoning.
a. $2 \rightarrow 3 \cap 1 \rightarrow 2$
b. 1 2 2

21. Hot Tub The inside of a circular hot tub is lined with 1 -inch by 1 -inch tiles.
a. Explain how to estimate the number of tiles needed for the hot tub.
b. The hot tub is 3.5 feet deep and has a diameter of 6 feet. What is the minimum number of tiles needed? (The formula for the circumference of a circle is $C=\pi d$.)

Job Offers In Exercises 22-24, use the job offers shown.

Offer A

| Salary Rate: | $\$ 3200$ per month |
| :--- | :--- |
| 401(k): | $3 \%$ matching |
| Health Insurance: | $\$ 850$ per month |
| Sales Commission: | $\$ 0-2500$ per month |

Offer B

| Salary Rate: | $\$ 25$ per hour |
| :--- | :--- |
| 401 $(\mathrm{k}):$ | $5 \%$ matching |
| Health Insurance: | $\$ 650$ per month |
| Profit Sharing: | $\$ 0-15,000$ per year |

22. What are the minimum and maximum yearly total compensations for each job offer?
23. Which job offer do you think is better? Explain your reasoning.
24. You decide to make a counteroffer to the company you did not choose in Exercise 23. How does your counteroffer differ from the original? Explain your reasoning.
