$\qquad$
$\qquad$

## Skills Maintenance

## Complex Patterns

## Activity 1

Select the algebraic pattern that matches the pattern of the numbers in the table.
1.

| Box Number | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Circles | 2 | 3 | 4 | 5 | 6 |

(a) $n-1$
(b) $n+2$
(c) $n+1$
2.

| Box Number | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Circles | 4 | 5 | 6 | 7 | 8 |

(a) $n-3$
(b) $n+3$
(c) $n+4$
3.

| Box Number | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Circles | 0 | 1 | 2 | 3 | 4 |

(a) $n-1$
(b) $n+0$
(c) $n+1$

Name Date $\qquad$

## Problem-Solving Activity <br> Ratio Problems

The table shows the costs for different items in a discount drug store. Find the ratio or proportion to answer the questions, based on the information in the table. Show your work.

| Sammie's Discount Drugstore |  |  |
| :--- | :--- | :--- |
| Item | Quantity and Price | Weekly Special |
| Soap | 10 bars for $\$ 4$ | no |
| Razors | 5 razors for $\$ 5$ | 10 razors for $\$ 8$ |
| Hair bands | 1 box for $\$ 3.00$ | no |
| Combs | 3 combs for $\$ 1$ | no |
| Toothpaste | 4 tubes for $\$ 8$ | 7 tubes for $\$ 16$ |
| Toothbrush | 2 toothbrushes $\$ 6$ | no |
| Shampoo | 2 bottles for $\$ 5$ | 8 bottles $\$ 20$ |
| Bandages | 4 boxes for $\$ 8$ | no |

1. You want to buy toothpaste. Which is the better deal, the regular price or the sale price? $\qquad$
$\qquad$
2. What is the cost of just one bar of soap? $\qquad$
$\qquad$
3. How much do you need to pay if you buy 9 combs and 4 toothbrushes? $\qquad$
$\qquad$
4. Which is the better deal on shampoo, the regular price or the sale price? $\qquad$
$\qquad$
