## Another Look!

Simon has 28 baseball cards and 16 soccer cards. Each month he plans to get 6 more baseball cards and 4 more soccer cards. Will he ever have the same number of baseball cards and soccer cards? Explain.

For each type of card, write a rule and make a table. On the same grid, graph the ordered pairs in each table.

Baseball Cards: Start at 28 and add 6.

| Months | Start | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Baseball Cards | 28 | 34 | 40 | 46 | 52 | 58 | 64 |

Soccer Cards: Start at 16 and add 4.

| Months | Start | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Soccer Cards | 16 | 20 | 24 | 28 | 32 | 36 | 40 |

He will never have the same number of baseball cards and soccer cards. The lines are getting farther apart, so the number of soccer cards will never catch up.

## Additional



## Make Sense and Persevere

The stingray tank contains 6 inches of water. The shark tank is empty. Each hour, 4 inches of water are added to the stingray tank and 6 inches are added to the shark tank. Will the water in the shark tank ever be as deep as the water in the stingray tank? Explain.

| Hours | Start |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Depth (in.) | 6 |  |  |  |  |  |  |


| Hours | Start |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Depth (in.) | 0 |  |  |  |  |  |  |

1. Write a rule and complete each table.

Rule:

Rule:
2. Graph the ordered pairs in each table.
3. Explain whether the depth of water in the two tanks will ever be equal.

## Fall Festival

The park district wants to hire a deejay for the Fall Festival. They expect the festival to last no more than 6 hours. Which deejay would be less expensive?
4. Make Sense and Persevere How can you use tables and a graph to solve the problem?

5. Use Appropriate Tools For each deejay, write a rule and complete the table.

Rule: $\qquad$

| Hours | Start |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost (\$) | 90 |  |  |  |  |  |  |

Rule: $\qquad$

| Hours | Start |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost (\$) | 20 |  |  |  |  |  |  |

6. Use Appropriate Tools On the grid, graph the ordered pairs in each table.

7. Be Precise Which deejay would be less expensive?

