# Ready, Set, Go!



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# Ready

Topic: Comparing linear equations and arithmetic sequences

1. Describe similarities and differences between linear equations and arithmetic sequences.

| Similarities | Differences |
|--------------|-------------|
|              |             |
|              |             |
|              |             |
|              |             |
|              |             |
|              |             |
|              |             |

#### Set

Topic: representations of arithmetic sequences

Use the given information to complete the other representations for each arithmetic sequence.

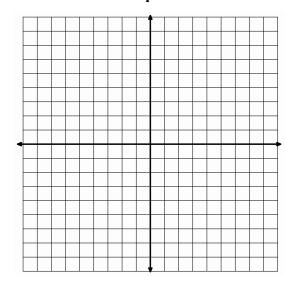
#### 2. Recursive Equation:

#### **Explicit Equation:**

| Table |      |
|-------|------|
| Days  | Cost |
| 1     | 8    |
| 2     | 16   |
| 3     | 24   |
| 4     | 32   |
|       |      |

Create a context

#### Graph



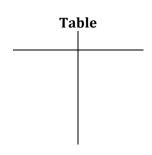
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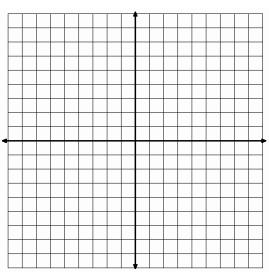
**Recursive Equation:** f(1) = 4, f(n) = f(n-1) + 33.

Graph

**Explicit Equation**:

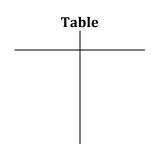


Create a context



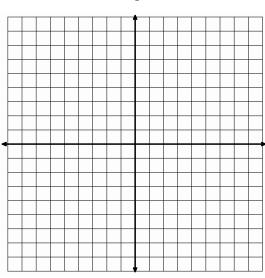
**Recursive Equation:** 

**Explicit Equation**: f(n) = 4 + 5(n - 1)



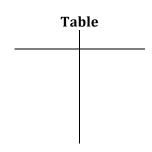
Create a context

# Graph



5. **Recursive Equation:** 

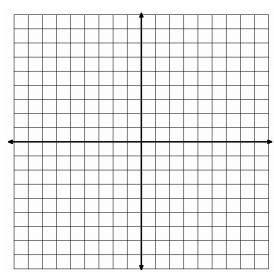
## **Explicit Equation:**



#### Create a context

Janet wants to know how many seats are in each row of the theater. Jamal lets her know that each row has 2 seats more than the row in front of it. The first row has 14 seats.

## Graph



## Go

Topic: Writing explicit equations

Given the recursive equation for each arithmetic sequence, write the explicit equation.

6. 
$$f(n) = f(n-1) - 2$$
;  $f(1) = 8$ 

7. 
$$f(n) = 5 + f(n-1)$$
;  $f(1) = 0$ 

8. 
$$f(n) = f(n-1) + 1$$
;  $f(1) = \frac{5}{3}$