

# Patterns: Extending Tables

Sometimes a rule tells us how to create a sequence of numbers.

**Rule A:** Start with 0. Add 5.

**Rule B:** Start with 0. Add 15.

We can use a table to collect the sequences, and find a corresponding relationship between the terms.

	Start	First Term	Second Term	Third Term
<b>Rule A</b>	0	5	10	15
<b>Rule B</b>	0	15	30	45

Look for a way in which the numbers in each column are related. Each term from Rule B is 3 times as great as the corresponding term in Rule A.

In 1–4, fill in the tables and find the relationship between the corresponding terms.

1. **Rule A:** Start with 20. Subtract 2.      **Rule B:** Start with 40. Subtract 2.

	Start	First Term	Second Term	Third Term
<b>Rule A</b>	20	18	16	
<b>Rule B</b>	40	38	36	

2. **Rule C:** Start with 30. Add 5.      **Rule D:** Start with 50. Add 5.

	Start	First Term	Second Term	Third Term
<b>Rule C</b>	30	35		
<b>Rule D</b>	50	55		

3. **Rule G:** Start with 0. Add 2.      **Rule H:** Start with 0. Add 10.

	Start	First Term	Second Term	Third Term
<b>Rule G</b>				
<b>Rule H</b>				

Name \_\_\_\_\_

# Patterns: Extending Tables

In 1–3, fill in the tables and find the relationship between the corresponding terms.

1. **Rule A:** Start with 40. Subtract 5.      **Rule B:** Start with 63. Subtract 5.

	Start	First Term	Second Term	Third Term
<b>Rule A</b>	40	35		
<b>Rule B</b>	63	58		

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2. **Rule C:** Start with 64. Divide by 4.      **Rule D:** Start with 128. Divide by 4.

	Start	First Term	Second Term	Third Term
<b>Rule C</b>	64			
<b>Rule D</b>	128			

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3. **Rule G:** Start with 3. Multiply by 2.      **Rule H:** Start with 6. Multiply by 2.

	Start	First Term	Second Term	Third Term
<b>Rule G</b>				
<b>Rule H</b>				

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In 4–7, find the relationship between the corresponding terms in each rule.

4. **Rule A:** Start with 47. Subtract 3.

**Rule B:** Start with 59. Subtract 3.

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5. **Rule A:** Start with 9. Add 4.

**Rule B:** Start with 22. Add 4.

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6. **Rule A:** Start with 6. Multiply by 2.

**Rule B:** Start with 18. Multiply by 2.

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7. **Rule A:** Start with 64. Divide by 2.

**Rule B:** Start with 256. Divide by 2.

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