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Math worksheet on *'Patterning - Rule from Equation for Geometric Pattern (Level 1)'*. Part of a broader unit on *'Patterns and Sums - Practice'*

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1

Find the rule that describes this pattern equation $a_n = 3 \times 2^{n-1}$

a Start at 3 and add 2 for each term	**b** Start at 7 and multiply by 2 for each term
c Start at 3 and multiply by 6 for each term	**d** Start with 3 and 5. Add the prior two terms for each subsequent term
e Start at 3 and subtract 2 for each term	**f** Start at 3 and multiply by 2 for each term

2

Find the rule that describes this pattern equation $a_n = 3 \times 5^{n-1}$

a Start at 7 and multiply by 5 for each term	**b** Start with 3 and 8. Add the prior two terms for each subsequent term
c Start at 3 and add 5 for each term	**d** Start at 3 and multiply by 3 for each term
e Start at 3 and subtract 5 for each term	**f** Start at 3 and multiply by 5 for each term

3

Find the rule that describes this pattern equation $a_n = 2 \times 4^{n-1}$

a Start at 3 and multiply by 4 for each term	**b** Start at 2 and multiply by 4 for each term
c Start with 2 and 6. Add the prior two terms for each subsequent term	**d** Start at -1 and multiply by 4 for each term
e Start at 2 and subtract 4 for each term	**f** Start at 6 and multiply by 4 for each term

4

Find the rule that describes this pattern equation $a_n = 1 \times 4^{n-1}$

a Start at -3 and multiply by 4 for each term	**b** Start at 1 and subtract 4 for each term
c Start at 0 and multiply by 4 for each term	**d** Start at 2 and multiply by 4 for each term
e Start at 1 and add 4 for each term	**f** Start at 1 and multiply by 4 for each term

5

Find the rule that describes this pattern equation $a_n = 1 \times 3^{n-1}$

a Start at 1 and multiply by -1 for each term	**b** Start at -1 and multiply by 3 for each term
c Start at 1 and multiply by 1 for each term	**d** Start at 1 and multiply by 3 for each term
e Start at 0 and multiply by 3 for each term	**f** Start at 1 and subtract 3 for each term

6

Find the rule that describes this pattern equation $a_n = 1 \times 2^{n-1}$

a Start at 1 and multiply by 0 for each term	**b** Start at 1 and multiply by 2 for each term
c Start at 3 and multiply by 2 for each term	**d** Start at 1 and multiply by 6 for each term
e Start with 1 and 3. Add the prior two terms for each subsequent term	**f** Start at 1 and subtract 2 for each term

7

Find the rule that describes this pattern equation $a_n = 2 \times 5^{n-1}$

a Start at 0 and multiply by 5 for each term	**b** Start with 2 and 7. Add the prior two terms for each subsequent term
c Start at 2 and multiply by 8 for each term	**d** Start at 2 and multiply by 5 for each term
e Start at 2 and subtract 5 for each term	**f** Start at 2 and add 5 for each term