Maths with Melissa

Geometric Sequence Worksheet

- 1. Write the next two terms in the geometric sequence: 3, 6, 12, 24, ...
- 2. Find the common ratio in the geometric sequence: 81, 27, 9, 3, ...
- 3. What is the 6th term of the geometric sequence where the first term is 2 and the common ratio is 5?
- 4. If the first term of a geometric sequence is 10 and the second term is 5, what is the 4th term?
- 5. The 1st term of a geometric sequence is 7 and the 3rd term is 63. Find the common ratio.
- 6. In a geometric sequence, the 2nd term is 18 and the 4th term is 162. What is the first term?
- 7. The sum of the first three terms of a geometric sequence is 21. If the first term is 3 and the common ratio is r, find the value of r.

Sequencing Events

- 8. Arrange the following numbers in the order they appear in the geometric sequence: 2, 8, 32, 128, 512
- 9. The following sequence is missing one term: 5, __, 45, 135, 405. Fill in the missing term and write the full sequence in order.
- 10. Place these terms in the correct order to form a geometric sequence: 1, 8, 4, 2, 16

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Answer Key

- 1. 48, 96
- 2. $\frac{1}{3}$
- 3. 625
- 4. 1.25
- 5. 3
- 6. 26
- 7. r = 2

Sequencing Events

- 8. 2, 8, 32, 128, 512
- 9. 15; The full sequence is 5, 15, 45, 135, 405
- 10. 1, 2, 4, 8, 16