

Name: _____

Date: _____

Common ratio r : multiply each time. $a_n = a_1 * r^{(n-1)}$. Last two are challenge problems!

1. 3, 6, 12, 24: find r .

show your work

2. Same sequence: next two terms?

show your work

3. 81, 27, 9, ...: find r .

show your work

4. $a_1 = 5$, $r = 3$. Find a_4 .

show your work

5. $a_1 = -2$, $r = -3$. Find a_4 . (Trainer echo - Jan 2026 Q24!)

show your work

6. Write the formula for 4, 8, 16, ...

show your work

7. $a_n = 2(5)^{(n-1)}$. Find a_3 .

show your work

8. Is 2, 6, 18, 54 geometric or arithmetic?

show your work

9. $a_1 = 5$, $r = 3$. Find a_8 . (Trainer
echo - Aug 2025 Q29!)

★ CHALLENGE

show your work

10. A geometric sequence has $a_2 = 12$ and $a_5 = 96$. Find r and a_1 .

★ CHALLENGE

show your work