H.W.

Is the given sequence geometric? If so, identify the common ratio and find the next two terms:

1. $1, 2, 4, 8, \ldots$
2. $1, 2, 3, 4, \ldots$
3. $1, -2, 4, -8, \ldots$
4. $-2, 2, -2, 2, \ldots$
5. $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \ldots$
6. $7, 0.7, 0.07, 0.007, \ldots$

Write the recursive and explicit formula for each sequence. Then, find the 2nd and 3rd term:

7. $a_1 = 5; r = -3$
8. $a_1 = \frac{1}{2}; r = \frac{2}{3}$
9. $a_1 = 30; r = 0.5$

Find the missing term(s) of the geometric sequence: (remember, you may have two ratios)

10. $\frac{2}{5}, [\ ], \frac{8}{45}$
11. $360, [\ ], [\ ], 45$
12. $100, [\ ], [\ ], [\ ], \frac{25}{4}$

Find the 10th term of each sequence:

13. $a_9 = 8; r = -\frac{1}{2}$
14. $a_{11} = -5; r = -\frac{1}{2}$
15. $a_{11} = -\frac{1}{3}; r = \frac{2}{3}$