Write the first 5 terms of the sequence

11. $a_n = \dfrac{n}{n+2}$
9.1

7. $a_n = 4n - 7$
9.1

Find the sum.

67. $\sum_{i=1}^{5} (2i + 1)$
9.1

73. $\sum_{i=1}^{4} 2^i$
9.1

Determine whether the sequence is arithmetic (or geometric). If it is arithmetic, then find the common difference d. If it is geometric, then find the common ratio r.

5. 10, 8, 6, 4, 2, …
9.2

9. $\frac{9}{4}, 2, \frac{7}{4}, \frac{3}{2}, \frac{5}{4}, \ldots$
9.2

7. $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}, 1, \ldots$
9.3

7. 1, 2, 4, 8, 16,…
9.2

5. 2, 10, 50, 250, …
9.3

Find a formula for a_n for the arithmetic sequence.

21. $a_1 = 1, d = 3$

25. $4, \frac{3}{2}, -1, -\frac{7}{2}, \ldots$

Write the first five terms of the geometric sequence.

13. $a_1 = 4, r = 3$
9.3

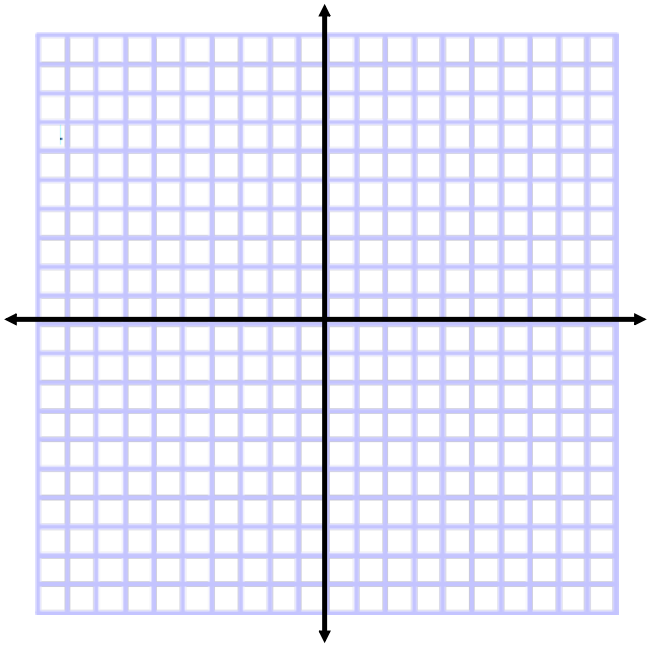
15. $a_1 = 1, r = \frac{1}{2}$
9.3

Find the sum of the finite geometric sequencs

57. $\sum_{n=1}^{6} (-7)^{n-1}$
9.3

Write the standard form of the following equation, and identify it as an ellipse or hyperbola.
Use the equation for the (ellipse or hyperbola) and find the following: center, vertices, foci, graph (include center, vertices, foci and if needed asymptotes).

29. $16x^2 + 9y^2 - 32x + 72y + 16 = 0$
10.3



37. $9x^2 - 16y^2 - 18x - 32y - 151 = 0$
10.4