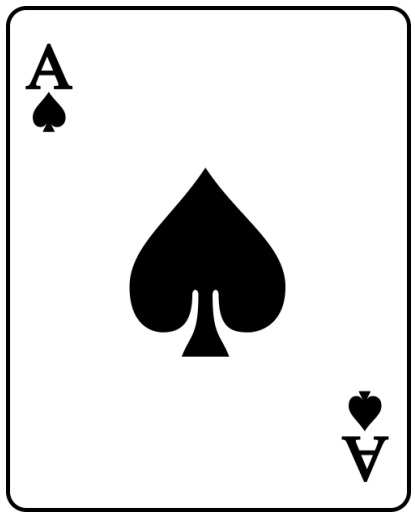
**a. Say whether the given sequence is arithmetic, geometric, or neither.**

**b. If it is arithmetic, give the common difference. If it is geometric, give the common ratio.**

**c. Find the next four terms.**

1) $40.5 \ , \ \frac{81}{4} \ , \ 10\frac{1}{8} \ , \ \frac{81}{16}$

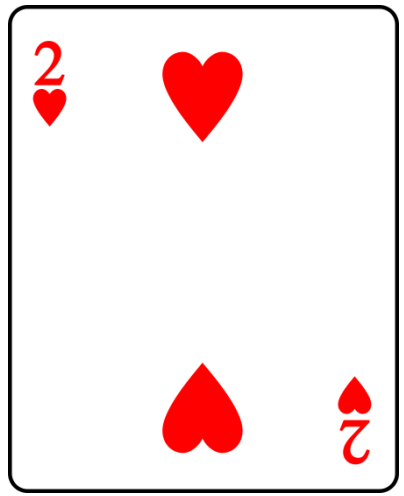
2) 7.9, 5.7, 3.5, 1.3



**Find the first four terms of each sequence.**

1) $f(1) = 8 \quad f(n) = 2 \cdot f(n-1) + 10$

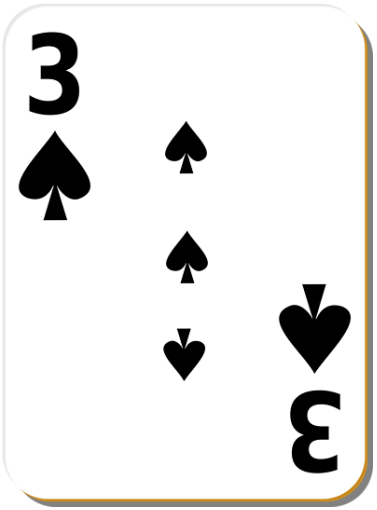
2) $a_n = 10 \cdot 3^{n-1}$



**Find the indicated term of the sequence.**

1) $15^{\text{th}}$ term: 5, 15, 45, …

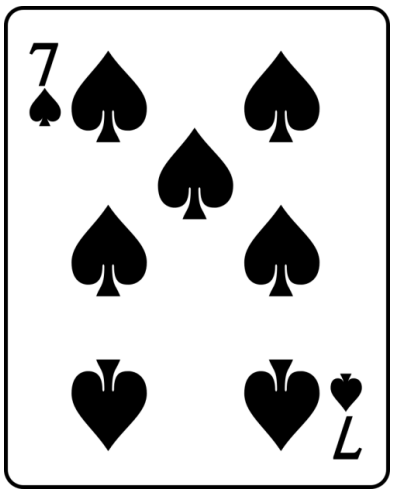
2) $6^{\text{th}}$ term: $a_1 = 3 \quad a_n = a_{n-1} + \frac{1}{3}$



**Write an explicit and recursive rule for each sequence.**

1) $-5, 20, -80, 320, \ldots$

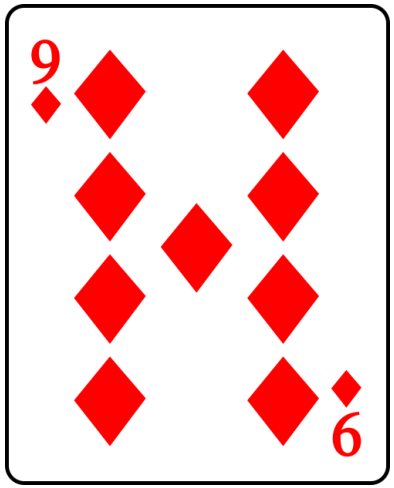
2) -8, -6, -4, …



**Each rule represents a sequence. If the given rule is recursive, write it as an explicit rule. If the rule is explicit, write it as a recursive rule.**

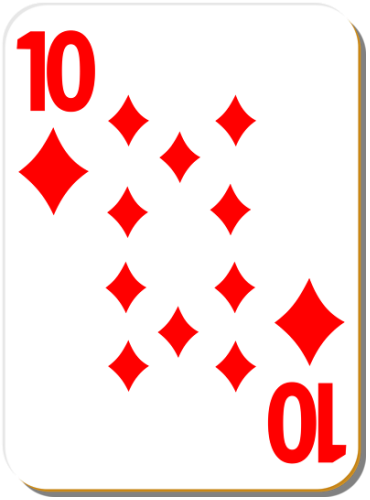
1) $f(1) = 6 \qquad f(n) = f(n-1) + 2.5$

2) $a_n = 22(5)^{n-1}$



1) Ben does one math problem on January 1st, 2017. He does five math problems on January 2nd, 2017, and nine math problems on January 3rd, 2017. The pattern continues in an arithmetic sequence. How many math problems did he do on January 14th?

2) How many math problems did he do **total** in the first two weeks of 2017?



1) If the 3rd term of a **geometric sequence** is **50** and the 6th term of a geometric sequence is **6.25**, write an explicit and recursive formula for the sequence.