

Sequences Day 3 Homework  
You may use a calculator!

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

1) 28th term:  $0, -4, -8, -12, \dots$

2) 15th term:  $2, 3.5, 5, 6.5,$

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

3) 10th term:  $8, 40, 200, 1000, \dots$

4) 7th term:  $2, 18, 162, 1458, \dots$

**Find the explicit AND recursive formula for each sequence:**

5)  $1, 7, 13, 19, \dots$

6)  $25, 125, 625, 3125, \dots$

7)  $15, 30, 60, 120, \dots$

8)  $3, 100, 197, 294, \dots$

**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.**

9)  $a_n = 11(2)^{n-1}$

10)  $f(1) = 2.5; f(n) = f(n-1) - 3.5$

## Semester Exam Review: Linear Functions

1. Graph:  $y = \frac{1}{5}x - 6$

2. Graph:  $y = \frac{2}{3}x + 5$

3. Graph:  $y = \frac{4}{3}x + 2$

4. Graph:  $y = -4x - 1$

5. Graph:  $2x + 3y = 12$

6. Graph:  $y - 5 = 3(x + 1)$

