Math on the Fly!

NAME: _____   DATE: _____

Arithmetic Sequences

For problems 1–6, find the next two terms of each arithmetic sequence.

1. 5, 11, 17, __ , __

2. 26, 18, 10, __ , __

3. –28, –21, –14, __ , __

4. 24.1, 22.5, 20.9, __ , __

5. $\frac{1}{2}$, $\frac{5}{4}$, 2, __ , __

6. –3, $-\frac{19}{6}$, $-\frac{10}{3}$, __ , __

Two different terms are given for each arithmetic sequence.
Find a_1, the first term of each sequence.

7. $a_2 = 11$, $a_4 = 19$

8. $a_3 = -14$, $a_6 = -5$

9. $a_3 = 6$, $a_7 = 30$

10. $a_2 = 43$, $a_6 = 15$

Find the 50th term of each arithmetic sequence.

11. 3, 6, 9, 12, 15…

12. 100, 92, 84, 76…

13. 4, 9, 14, 19, 24…

14. 120, 118, 116, 114…

SOLUTIONS

1. 23, 29 (Adding 6)

2. 2, −6 (Add −8 or Subtract 8)

3. −7, 0 (Adding 7)

4. 19.3, 17.7 (Add −1.6 or Subtract 1.6)

5. $\dfrac{11}{4}$, $\dfrac{7}{2}$ (Adding 3/4)

6. $-\dfrac{7}{2}$, $-\dfrac{11}{3}$ (Add by −1/6 or Subtract 1/6)

7. $a_1 = 7$

8. $a_1 = -20$

9. $a_1 = -6$

10. $a_1 = 50$

11. $a_{50} = 150$

12. $a_{50} = -292$

13. $a_{50} = 249$

14. $a_{50} = 22$