Name _____ Date _____ Class _____

LESSON 4-6

Practice A

Arithmetic Sequences

Determine if the sequence is arithmetic. Write *yes* or *no*.

1. 5, 9, 14, 20, ...

2. 10, 22, 34, 46, ...

Find the common difference for each arithmetic sequence.

3. 12, 15, 18, 21, ...

4. 30, 24, 18, 12, ...

Find the common difference for each arithmetic sequence. Then find the next three terms.

5. 20, 10, 0, −10, ...

6. 100, 98, 96, 94, ...

Find the indicated term of each arithmetic sequence.

7. 42nd term: $a_1 = 10$; $d = 6$

8. 27th term: 59, 56, 53, 50, ...

A swim pass costs $30 for the first month. Each month after that, the cost is $20 per month. Riley wants to swim for 12 months.

9. The sequence for this situation is arithmetic. What is the first term of this sequence?

10. What is the common difference?

11. The 12th term will be the amount Riley spends for a one year swim pass. Write the equation for finding the total cost of a one year swim pass.

12. What is the total amount of money Riley will spend for a one year swim pass?

Name _____ Date _____ Class _____

TEKS A.3.B

LESSON 4-6

Practice B

Arithmetic Sequences

Determine whether each sequence is an arithmetic sequence. If so, find the common difference and the next three terms.

1. −10, −7, −4, −1, ...

2. 0, 1.5, 3, 4.5, ...

3. 5, 8, 12, 17, ...

4. −20, −20.5, −21, −21.5, ...

Find the indicated term of each arithmetic sequence.

5. 28th term: 0, –4, –8, –12, ...

6. 15th term: 2, 3.5, 5, 6.5, ...

7. 37th term: $a_1 = -3$; $d = 2.8$

8. 14th term: $a_1 = 4.2$; $d = -5$

9. 17th term; $a_1 = 2.3$; $d = -2.3$

10. 92nd term; $a_1 = 1$; $d = 0.8$

11. A movie rental club charges $4.95 for the first month's rentals. The club charges $18.95 for each additional month. How much is the total cost for one year?

12. A carnival game awards a prize if Kasey can shoot a basket. The charge is $5.00 for the first shot, then $2.00 for each additional shot. Kasey needed 11 shots to win a prize. What is the total amount Kasey spent to win a prize?