UNIT 5 • COMPARING AND CONTRASTING FUNCTIONS
Lesson 4: Modeling with Functions

Assessment

Pre-Assessment

Circle the letter of the best answer.

1. How much does $f(x) = x^2 + 1$ change from $x = 0$ to $x = 1$?

   a. 1   c. -1

   b. 0   d. 2

2. Write an expression in terms of n to describe the sequence 4, 8, 12, 16, 20.... Note that 4 is the first term of the sequence.

   a. $2n$ c. $\dfrac{n}{3}$

   b. n d. $4n$

3. A fair charges $5 per person per visit. If a family of three has visited three times, how much has the family paid?

   a. $45   c. $60

   b. $30   d. $35

4. Amy put $120 in a bank account that earns 5% interest, compounded annually. How much will she have in 3 years?

   a. $132.52   c. $120

   b. $138.92   d. $143.68

5. Determine whether the table or the equation has a greater slope.

   $g(x) = 3x - 11$

x	1	2	3	4	5
$f(x)$	2	4	6	8	10

   a. The slope of $f(x)$ is greater.

   b. The slope of $g(x)$ is greater.

   c. Both have equal slopes.

   d. There is not enough information to determine this.