John drives from point A to B at speed of x miles per hour. On his way back, his speed is 10% faster. Which expression is his speed back?

(a) $x + 0.10$
(b) $x \times 0.10$
(c) $x \times 1.10$
(d) $x \times 0.90$

If $a = -2$, then $a + a^2 - a^3 + a^4 - a^5 =$

(a) -22
(b) -18
(c) 32
(d) 58

If 7 times a number is 84, what is 4 times the number?

(a) 16
(b) 28
(c) 48
(d) 56

If $4^x \cdot n^2 = 4^{x+1} \cdot n$ and x and n are both positive integers, what is the value of n ?

(a) 2
(b) 4
(c) 6
(d) 8

The sum of three numbers, a, b, and c, is 400. One of the numbers, a, is 40 percent less than the sum of b and c. What is the value of $b + c$?

(a) 40
(b) 60
(c) 150
(d) 250

Carlos and Katherine are estimating acceleration by rolling a ball from rest down a ramp. At 1 second, the ball is moving at 5 meters per second (m/s); at 2 seconds, the ball is moving at 10 m/s; at 3 seconds, the ball is moving at 15 m/s; and at 4 seconds, it is moving at 20 m/s. When graphed on an xy-plane, which equation best describes the ball's estimated acceleration where y expresses speed and x expresses time?

(a) $y = 5x + 5$
(b) $y = 25x$
(c) $y = 5x$
(d) $y = (4x + 1)^2 + 5$