1-1

Why Are Mr. and Mrs. Number So Happy?

Write an algebraic expression for each phrase. Write the letter of the exercise in the box that contains the number of the answer.

Let n represent an unknown number.

- (O) 8 more than 3 times the number
- (E) 9 less than twice the number
- (I) 8 minus the product of 9 and the number
- (A) The sum of 9 and twice the number
- (G) The difference of 8 and twice the number
- (T) The quotient of 3 times the number and 8
- (E) One-third of twice the number

(26) $8 - 9n$	(8) $2n - 9$	(24) $3n + 9$
(10) $8 - 2n$	(19) $9 + 2n$	(17) $3n + 8$
(31) $\frac{3n}{2}$	(30) $\frac{2n}{3}$	(1) $\frac{3n}{8}$

Let a represent Zog's age now.

- (E) Zog's age in nine years
- (L) Zog's age four years ago
- (T) 9 times the sum of Zog's age and 4 years
- (A) Three times Zog's age in two years
- (E) 2 years more than 3 times Zog's age
- (Y) Nine times Zog's age four years ago
- (G) Four years less than 9 times Zog's age

(6) $3(a + 2)$	(14) $9a - 4$	(25) $a - 4$
(4) $9(a - 4)$	(16) $9(a + 4)$	(22) $9a + 2$
(9) $4a + 9$	(3) $a + 9$	(34) $3a + 2$

Let w represent the width of a rectangle. The length is 7 cm more than the width.

- (I) Four times the length
- (A) 7 cm more than four times the width
- (H) One-fourth of the length
- (O) 7 cm less than twice the width
- (E) 7 times the sum of the width and 4 cm
- (N) Twice the width plus twice the length
- (T) The product of the width and the length

(5) $4w - 2$	(12) $4(w + 7)$	(13) $2w + 2(w + 7)$
(21) $7(w + 4)$	(28) $w(w + 7)$	(32) $2w - 7$
(2) $\frac{w + 7}{4}$	(23) $4w + 7$	(15) $\frac{w + 4}{2}$

Let p represent the price of a CD. A tape costs $5 less than a CD.

- (Y) The price of a CD increased by $6
- (O) The price of six tapes
- (L) $5 less than the price of six CD's
- (H) Half the price of a tape
- (R) The price of five CD's and two tapes
- (T) The price of two CD's and five tapes
- (N) $6 less than the price of a tape

(29) $6p - 5$	(20) $p + 6$	(27) $2p + 5(p - 5)$
(24) $5p - 6$	(31) $2p + 5p$	(33) $(p - 5) - 6$
(11) $6(p - 5)$	(18) $\frac{p - 5}{2}$	(7) $5p + 2(p - 5)$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34