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) $\dfrac{3n}{2}$ (30) $\dfrac{2n}{3}$ (1) $\dfrac{3n}{8}$

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) $\dfrac{w + 7}{4}$ (23) $4w + 7$ (15) $\dfrac{w + 4}{2}$

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

(V) 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) $\dfrac{p - 5}{2}$ (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

Why Don't They Allow Scissors in the School Cafeteria?

Write an algebraic expression for each exercise. In each set, find exercises with matching answers. One will have a letter and the other a number. Write the letter in the matching numbered box.

Let n = the number of points that Abe scored. Write an expression for the number of points scored by:

E. Bart: 5 points more than Abe.

I. Carl: 5 points less than Abe.

U. Don: one-fifth as many points as Abe.

N. Evan: 3 times as many points as Abe.

H. Fred: 5 points less than Evan.

Let n = an unknown number. Write an expression for each phrase:

14. The product of 3 and the number.

5. The sum of the number and 5.

19. The difference of the number and 5.

2. Five less than 3 times the number.

10. The quotient of the number and 5.

Let x = the number of points that Uma scored. Write an expression for the number of points scored by:

T. Vera: twice as many points as Uma.

I. Willa: 7 points less than Vera.

E. Xena: 7 points more than Vera.

S. Yara: 7 points more than Uma.

N. Zora: twice as many points as Yara.

Let x = an unknown number. Write an expression for each phrase:

21. Twice the number, increased by 7.

16. Twice the number, decreased by 7.

6. The sum of the number and 7.

17. Twice the sum of the number and 7.

12. The number times 2.

Let w = the width of a rectangle. The length is 4 cm more than the width. Write an expression for:

T. Nine times the width.

N. Half the width.

I. The length.

E. Nine times the length.

O. 2 cm less than nine times the width.

w ▭

Let w = an unknown number. Write an expression for each phrase:

13. Four more than the number.

3. 9 times the sum of the number and 4.

8. Nine times the number, reduced by 2.

1. The product of the number and 9.

20. The quotient of the number and 2.

Answer each question with an algebraic expression.

G. If x is the height of a block, how high is a stack of 20 blocks?

R. If x is Mr. Zen's age now, how old will he be in 8 years?

N. If you take 20 cards from a pile of x cards, how many cards are left in the pile?

C. If Gina bought x pizzas, each cut into 8 pieces, how many pieces did she get?

L. If x is the price of a book you buy, how much change will you get from a $20 bill?

T. If x players are divided into 8 teams, how many players are on each team?

9. If you work for x hours and earn $8 per hour, how much will you earn in all?

18. If you take x cards from a pile of 20 cards, how many cards are left in the pile?

4. If Kim has x comic books and you have 8 more than Kim, how many do you have?

7. If x is Ms. Zon's age now, how old was she 20 years ago?

11. If x players are divided into teams of 8, how many teams are there?

15. If x is the weight of a brick, what is the weight of 20 bricks?

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

Expressions, Equations, and Inequalities:
Modeling Verbal Expressions