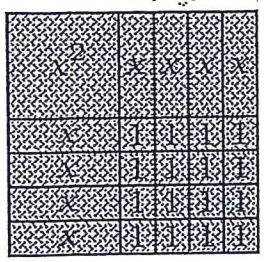
Why Did Kevin Klutz Give Up Tap Dancing?

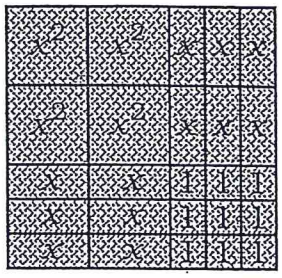
Write the letter of the exercise in the box that contains the number of the answer.

Set 1. Write a polynomial for the shaded area, then factor the polynomial.

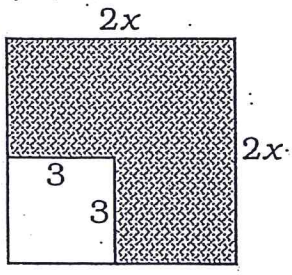
(L)



(I)



(T)



Set 1 Answers

(27) $(2x+3)^2$

(5) $(2x-3)^2$

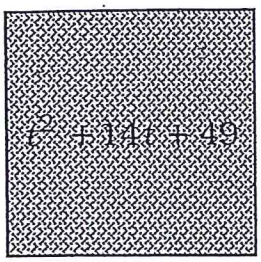
(22) $(2x+3)(2x-3)$

(11) $(x+4)^2$

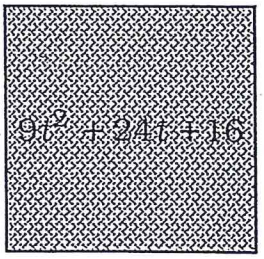
(18) $(x+3)(x-3)$

Set 2. Find the length of a side of the square. The area is given.

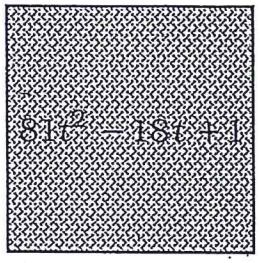
(I)



(H)



(E)



Set 2 Answers

(29) $9t+1$

(17) $t+7$

(24) $9t-1$

(12) $3t+8$

(1) $3t+4$

Set 3. Factor the expression.

(I) n^2-36

(E) $n^2-12n+36$

(T) n^2-400

(K) $n^2+24n+144$

(N) $4n^2-25$

(O) $4n^2+20n+25$

Set 3 Answers

(23) $(2n+15)(2n-15)$

(20) $(2n+5)^2$

(13) $(n+6)(n-6)$

(15) $(n-20)^2$

(14) $(2n+5)(2n-5)$

(5) $(n-6)^2$

(9) $(n+12)(n-12)$

(10) $(2n-5)^2$

(19) $(n+20)(n-20)$

(29) $(n+12)^2$

Set 4. Factor the expression.

(T) $16a^2-1$

(H) $16a^2-8a+1$

(A) $9a^2-64$

(E) $9a^2+48a+64$

(N) $4-49a^2$

(K) $4-28a+49a^2$

Set 4 Answers

(7) $(4a+1)(4a-1)$

(21) $(3a-8)^2$

(26) $(3a+16)(3a-16)$

(2) $(3a+8)^2$

(18) $(2+7a)(2-7a)$

(8) $(2+7a)^2$

(10) $(3a+8)(3a-8)$

(23) $(4a-1)^2$

(12) $(4a+2)(4a-2)$

(4) $(2-7a)^2$

Set 5. Factor the expression.

(G) $100x^2-y^2$

(S) $100x^2+20xy+y^2$

(P) $4x^2-81y^2$

(F) $4x^2-36xy+81y^2$

(N) $64x^2-225y^2$

(L) $x^2+60xy+900y^2$

Set 5 Answers

(16) $(x+30y)(x-30y)$

(9) $(2x-9y)^2$

(28) $(8x+15y)(8x-15y)$

(3) $(2x+9y)^2$

(15) $(10x+y)(10x-y)$

(26) $(10x+y)^2$

(25) $(4x+15y)(4x-15y)$

(12) $(x+30y)^2$

(6) $(2x+9y)(2x-9y)$

(21) $(10x-y)^2$

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

Multiplying Binomials; Differences of Squares; Squares of Binomials

NAME _____

Express each product as a binomial.

9. $(x - 7)(x + 7)$ _____

10. $(3x - 4)(3x + 4)$ _____

11. $(2c - 5)(2c + 5)$ _____

12. $(a^2 + 2b^2)(a^2 - 2b^2)$ _____

Factor.

13. $169 - 4b^2$ _____

14. $625a^4 - 144b^2$ _____

15. $x^6 - 196$ _____

16. $121x^2 - y^2$ _____

Express each square as a trinomial.

17. $(2a - b)^2$ _____

18. $(y^2 + 5)^2$ _____

19. $(3k - 2m)^2$ _____

20. $(3a + 3b)^2$ _____

Factor each trinomial as the square of a binomial. If it is not possible, write "not factorable."

23. $x^2 - 8x + 16$ _____

24. $4a^2 - 4ab + b^2$ _____

25. $x^2 + 5x + 25$ _____

26. $9a^2 - 12ab + 4b^2$ _____