How Does a Dog Stop a CD Player?

Find each answer in the adjacent answer column. Write the letter of the answer in the box containing the number of the exercise.

Find the least common multiple of the given numbers.

- 1. 2, 9 18
- **4.** 18, 45 90
- 7. 4, 6, 8 34

- **2.** 4, 22 44
- **5.** 25, 15 **7**5
- **8.** 12, 15, 20 60

- **3.** 30, 40 **120**
- **6.** 16, 9 144
- **9.** 4, 10, 25 (0)

	(A)	DE LE	
6 .	175	N 60	B144
ers 1	L 32	A 18	P 100
nsw	X 44	990	K 160
A	S 24	M 72	E 120
\sim	~~~	$\overline{\sim}$	$\overline{}$

Solve each problem.

- 10. Hot dogs are sold in packs of 10. Buns are sold in packs of 8. What is the least number of hot dogs you can buy so that you can also buy a matching number of buns?
- 11. A teacher notices that his class can be divided into groups of 5 students or groups of 7 students. There is no other way to make equal-sized groups. How many students are in the class?
- 12. Many people like Koko's Restaurant. Abe eats there every other day. Beth eats there every 3 days. Carol eats there every 4 days. Don eats there every 5 days. By chance, all four of them are eating at Koko's today. How many days will it be until this happens again?
- 13. You have a box of tiles, each of which measures 6 by 10 inches. What is the least number of tiles you could use to form a square region? (Use this square to show how they would be arranged.)

-13	R 50	A 20
9 10	S 35	B-15
wer	O 45	E 40
Ans	J-60	F 75

10	30	10
	C	G
14 6	6	6
6	6	6
C	6	1 4
6	6	6

The prime factorizations of five numbers are given. Use them to find each LCM.

- $A = 2 \cdot 2 \cdot 5$
- 14. LCM of A and B. 280
- $B=2\cdot 2\cdot 2\cdot 7$
- **15.** LCM of *A* and *C*. 300
- $C = 2 \cdot 3 \cdot 5 \cdot 5$
- 16. LCM of C and D. 4950
- $D = 3 \cdot 3 \cdot 5 \cdot 11$
- 17. LCM of B and E. 1064
- $E = 2 \cdot 2 \cdot 7 \cdot 19$
- 18. LCM of C and E. 39,900

D 2440	N 300
Y 1064	S 82,250
₹ H 280	y / 39,900
₹ E 360	6 4950

Write the prime factorization of each number. Then use them to find each LCM.

12 =

19. LCM of 12 and 26. 156

26 =

20. LCM of 12 and 16. 48

16 =

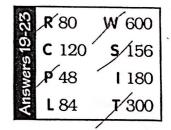
21. LCM of 12 and 75. 300

75 =

22. LCM of 16 and 40 **90**

40 =

23. LCM of 75 and 40. 000



6 17 9 22 3 11 19 5 8 16 12 14 10 20 1 23 7 13 18 2 21 4 15 B Y P R E S S I N G T H E P A W S B U T T O N

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Number Theory: Least Common Multiple