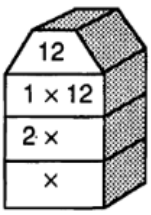
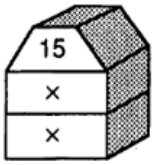
Factor Towers

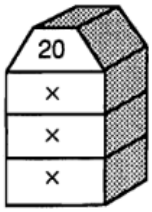
Write a pair of factors in each "story" of the factor tower. Then count the number of different factors and write this number in the blank.



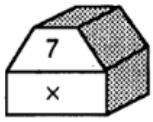
Number of factors ____



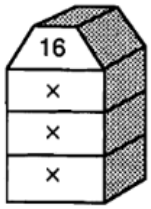
Number of factors ____



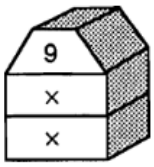
Number of factors ____



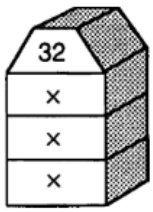
Number of factors ____



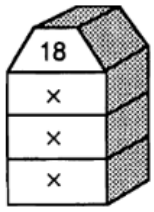
Number of factors ____



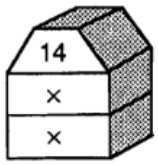
Number of factors ____



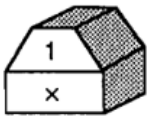
Number of factors ____



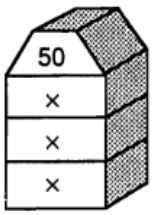
Number of factors ____



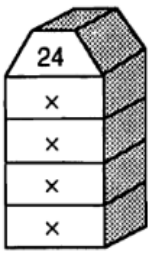
Number of factors ____



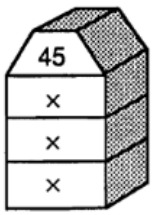
Number of factors ____



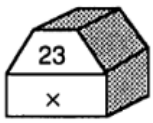
Number of factors ____



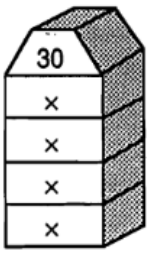
Number of factors ____



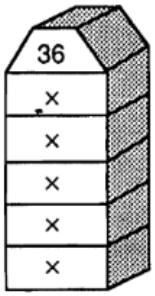
Number of factors ____



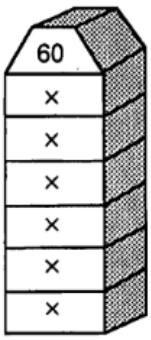
Number of factors ____



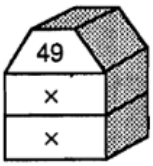
Number of factors ____



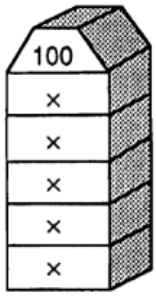
Number of factors ____



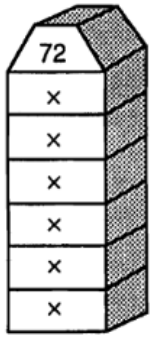
Number of factors ____



Number of factors ____



Number of factors ____



Number of factors ____

Why Did Igor Spend 10 Years Studying Geology?

Find the least common multiple (LCM) for each pair of numbers. Look for your answer in the set of boxes under the exercise. Write the letter of the exercise in the box containing the answer.

(T) LCM of 3 and 5	(B) LCM of 7 and 21
(E) LCM of 4 and 6	(W) LCM of 10 and 70
(A) LCM of 2 and 9	(D) LCM of 5 and 2
(O) LCM of 10 and 4	(E) LCM of 15 and 9
(H) LCM of 9 and 12	(T) LCM of and 8
(E) LCM of 6 and 5	(N) LCM of 12 and 20

36	45	72	70	18	60	15	30	10	180	88	20	90	21	

(S) LCM of 8 and 6	(B) LCM of 10 and 6
(A) LCM of 15 and 25	(R) LCM of 7 and 8
(O) LCM of 4 and 8	(G) LCM of 25 and 10
(I) LCM of 6 and 9	(C) LCM of 45 and 15
(K) LCM of 8 and 10	(R) LCM of 30 and 40
(A) LCM of 9 and 4	(T) LCM of 24 and 9

75	180	30	18	50	48	120	8	45	40	150	24	72	36	56

What Is Rock 'N' Roll?

For each exercise, write or = in the ◯. Circle the appropriate number-letter.
Write the letter in the matching numbered box at the bottom of the page.

		>	<	=
1	$\frac{3}{8}$ ◯ $\frac{1}{2}$	29-L	10-H	15-F
2	$\frac{5}{8}$ ◯ $\frac{1}{2}$	19-A	24-M	16-P
3	$\frac{2}{4}$ ◯ $\frac{1}{2}$	21-U	4-G	31-I
4	$\frac{5}{12}$ ◯ $\frac{1}{2}$	29-V	15-T	8-K
5	$\frac{7}{12}$ ◯ $\frac{1}{2}$	5-N	16-B	33-E
6	$\frac{5}{10}$ ◯ $\frac{1}{2}$	1-S	21-R	24-O
7	$\frac{3}{5}$ ◯ $\frac{1}{2}$	29-E	13-V	25-W
8	$\frac{2}{5}$ ◯ $\frac{1}{2}$	23-M	4-A	18-D
9	$\frac{3}{7}$ ◯ $\frac{1}{2}$	12-P	16-S	27-K
10	$\frac{4}{7}$ ◯ $\frac{1}{2}$	8-I	14-U	20-N
11	$\frac{3}{6}$ ◯ $\frac{1}{2}$	34-B	3-G	21-D
12	$\frac{11}{20}$ ◯ $\frac{1}{2}$	33-T	6-F	13-L
13	$\frac{5}{9}$ ◯ $\frac{1}{2}$	1-A	18-P	28-N
14	$\frac{7}{16}$ ◯ $\frac{1}{2}$	9-G	13-H	12-C
15	$\frac{5}{11}$ ◯ $\frac{1}{2}$	32-R	27-I	7-L
16	$\frac{6}{11}$ ◯ $\frac{1}{2}$	23-T	6-E	20-U
17	$\frac{9}{16}$ ◯ $\frac{1}{2}$	14-A	22-S	26-M
18	$\frac{4}{9}$ ◯ $\frac{1}{2}$	28-R	34-O	2-T
19	$\frac{51}{100}$ ◯ $\frac{1}{2}$	18-H	9-N	3-C
20	$\frac{1}{2}$ ◯ $\frac{1}{3}$	6-D	26-F	11-E
21	$\frac{1}{2}$ ◯ $\frac{8}{16}$	7-M	30-R	12-T
22	$\frac{1}{2}$ ◯ $\frac{7}{15}$	32-N	20-J	2-L
23	$\frac{1}{2}$ ◯ $\frac{8}{15}$	9-P	28-T	17-S
24	$\frac{1}{2}$ ◯ $\frac{25}{50}$	3-F	25-A	9-C
25	$\frac{1}{2}$ ◯ $\frac{7}{10}$	11-S	20-R	26-V
26	$\frac{1}{2}$ ◯ $\frac{2}{3}$	30-N	3-S	7-R
27	$\frac{1}{2}$ ◯ $\frac{16}{32}$	2-T	17-O	26-B
28	$\frac{1}{2}$ ◯ $\frac{50}{100}$	25-P	22-Y	7-W

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

What Did George Washington Say To His Men On March 3?

Write each fraction in lowest terms. Find your answer in the adjacent answer columns. Write the letter of the exercise in the box containing the number of the answer.

W	$\frac{3}{9}$				I	$\frac{3}{24}$			
O	$\frac{2}{8}$	**Answers:**			T	$\frac{8}{18}$	**Answers:**		
L	$\frac{5}{10}$	12	$\frac{3}{5}$	25 $\frac{1}{4}$	O	$\frac{9}{15}$	4	$\frac{3}{5}$	17 $\frac{3}{4}$
T	$\frac{4}{6}$	5	$\frac{2}{5}$	1 $\frac{2}{3}$	R	$\frac{7}{21}$	2	$\frac{2}{3}$	15 $\frac{1}{2}$
H	$\frac{9}{12}$	10	$\frac{1}{3}$	19 $\frac{5}{6}$	W	$\frac{10}{12}$	20	$\frac{1}{3}$	27 $\frac{4}{9}$
R	$\frac{10}{25}$	22	$\frac{3}{4}$	16 $\frac{1}{2}$	L	$\frac{4}{8}$	14	$\frac{1}{8}$	8 $\frac{5}{6}$

R	$\frac{10}{16}$				O	$\frac{20}{30}$			
H	$\frac{15}{20}$	**Answers:**			C	$\frac{8}{16}$	**Answers:**		
E	$\frac{3}{30}$	11	$\frac{1}{10}$	6 $\frac{5}{8}$	F	$\frac{10}{45}$	19	$\frac{5}{12}$	24 $\frac{2}{9}$
O	$\frac{12}{14}$	9	$\frac{3}{8}$	18 $\frac{4}{5}$	M	$\frac{14}{20}$	7	$\frac{2}{3}$	23 $\frac{3}{5}$
M	$\frac{16}{20}$	13	$\frac{1}{6}$	28 $\frac{3}{4}$	A	$\frac{15}{36}$	26	$\frac{3}{8}$	3 $\frac{7}{10}$
W	$\frac{6}{36}$	2	$\frac{6}{7}$	12 $\frac{2}{5}$	R	$\frac{21}{56}$	17	$\frac{2}{7}$	21 $\frac{1}{2}$

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

BOOKS NEVER WRITTEN

Escape to the Forest by $\frac{}{13}$ 9 17 6 $\frac{}{8}$ $\frac{}{15}$ $\frac{}{7}$ $\frac{}{2}$ $\frac{}{3}$ $\frac{}{3}$ $\frac{}{15}$ $\frac{}{10}$

End of the Semester by $\frac{}{17}$ $\frac{}{14}$ $\frac{}{1}$ $\frac{}{16}$ $\frac{}{7}$ $\frac{}{11}$ $\frac{}{3}$ $\frac{}{16}$ $\frac{}{5}$

Stunt Driving for Fun by $\frac{}{4}$ $\frac{}{16}$ $\frac{}{4}$ $\frac{}{12}$ $\frac{}{17}$ $\frac{}{7}$ $\frac{}{16}$ $\frac{}{16}$ $\frac{}{10}$

ABOVE ARE THE TITLES OF THREE "BOOKS NEVER WRITTEN." TO DECODE THE NAMES OF THEIR AUTHORS:

For each exercise, compare the fractions or mixed numbers. Write > or < in each ◯. Circle the letter above the LARGER number. Write this letter above the exercise number each time it appears in the code.

1. Y G

$\frac{2}{3}$ ◯ $\frac{3}{5}$

2. K W

$\frac{1}{4}$ ◯ $\frac{2}{7}$

3. O S

$\frac{5}{6}$ ◯ $\frac{7}{10}$

4. E M

$\frac{1}{3}$ ◯ $\frac{2}{9}$

5. D T

$\frac{5}{16}$ ◯ $\frac{3}{8}$

6. I R

$\frac{7}{10}$ ◯ $\frac{5}{8}$

7. A L

$\frac{5}{8}$ ◯ $\frac{7}{12}$

8. H N

$\frac{1}{6}$ ◯ $\frac{7}{30}$

9. U P

$3\frac{6}{7}$ ◯ $3\frac{5}{7}$

10. V S

$2\frac{3}{4}$ ◯ $2\frac{5}{6}$

11. J P

$5\frac{1}{3}$ ◯ $5\frac{3}{8}$

12. X Z

$1\frac{1}{4}$ ◯ $1\frac{5}{32}$

13. L G

$4\frac{7}{9}$ ◯ $4\frac{3}{4}$

14. M B

$7\frac{5}{12}$ ◯ $7\frac{2}{5}$

15. H D

$2\frac{1}{2}$ ◯ $2\frac{4}{7}$

16. Which package is heavier:

(R) One that weighs $1\frac{3}{4}$ pounds; or

(F) One that weighs $\frac{5}{8}$ pounds?

17. Which insect is longer:

(V) One that measures $\frac{3}{8}$ inch; or

(C) One that measures $\frac{2}{5}$ inch?

Why Was the Zoo Worker Fired for Feeding the Monkeys?

Do each exercise and find your answer to the right. Write the letter of the answer in the box containing the number of the exercise. If the answer has a ●, shade in the box instead of writing a letter in it.

I. Write each fraction in lowest terms.

(1) $\frac{9}{12}$ (2) $\frac{8}{18}$

(3) $\frac{25}{40}$ (4) $\frac{12}{36}$

(5) $\frac{30}{100}$ (6) $\frac{16}{20}$

(7) $\frac{16}{32}$ (8) $\frac{15}{48}$

Answers		
(O) $\frac{4}{5}$	(E) $\frac{4}{9}$	
(C) $\frac{2}{5}$	(H) $\frac{5}{8}$	(F) $\frac{3}{8}$
(T) $\frac{3}{4}$	(I) $\frac{3}{10}$	(E) $\frac{5}{16}$
● $\frac{1}{2}$	(P) $\frac{2}{3}$	● $\frac{1}{3}$

Write each improper fraction as a mixed number and each mixed number as an improper fraction.

(9) $\frac{23}{5}$ (10) $\frac{18}{8}$

(11) $\frac{20}{12}$ (12) $\frac{45}{18}$

(13) $3\frac{3}{4}$ (14) $8\frac{3}{10}$

(15) $4\frac{7}{15}$ (16) $1\frac{11}{12}$

Answers		
(L) $\frac{20}{12}$	(T) $2\frac{1}{2}$	
● $\frac{83}{10}$	(S) $1\frac{2}{3}$	(D) $\frac{67}{15}$
(A) $\frac{72}{15}$	(O) $\frac{23}{12}$	
(H) $4\frac{3}{5}$	(E) $\frac{15}{4}$	● $2\frac{1}{4}$

Write a > or < in each. Then choose the SMALLER fraction and find it among the answers.

(17) $\frac{2}{3}$ ◯ $\frac{7}{9}$ (18) $\frac{2}{5}$ ◯ $\frac{1}{3}$

(19) $\frac{1}{4}$ ◯ $\frac{2}{9}$ (20) $\frac{5}{8}$ ◯ $\frac{7}{12}$

(21) $\frac{2}{5}$ ◯ $\frac{3}{10}$ (22) $\frac{4}{7}$ ◯ $\frac{1}{2}$

(23) $\frac{5}{8}$ ◯ $\frac{11}{16}$ (24) $\frac{3}{10}$ ◯ $\frac{1}{4}$

Answers		
● $\frac{11}{16}$	(M) $\frac{7}{12}$	
(F) $\frac{1}{2}$	(H) $\frac{2}{3}$	(L) $\frac{5}{8}$
● $\frac{2}{9}$	(T) $\frac{1}{4}$	(E) $\frac{1}{3}$
(S) $\frac{7}{9}$	(R) $\frac{2}{5}$	(N) $\frac{3}{10}$

3	13	10	22	8	15	19	1	17	2	20	4	24	6	14	12	9	18	7	23	5	16	21	11