

**1**

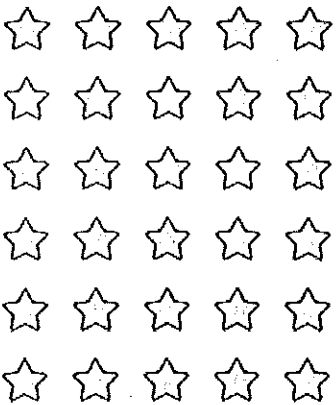
Click on the number buttons to answer the questions.

a. What is the number of rows? \_\_\_\_\_

b. What is the number of stars in each row? \_\_\_\_\_

**1**

Click on the number buttons to answer the questions.



a. What is the number of rows? \_\_\_\_\_

b. What is the number of stars in each row? \_\_\_\_\_

0 1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16 17 18 19 20

2

What number is equal to 5 sevens? (Use only the digits 0-9 to enter your answer.)

### 3

Which two questions can be answered correctly by finding  $27 \div 9$ ?

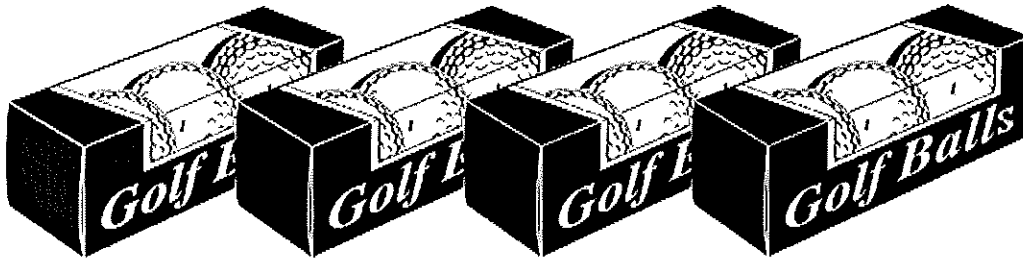
- A. If 27 students are placed into 9 equal-sized groups, how many students are in each group?
- B. If 9 rulers are stored in one box, how many boxes are needed to store 27 rulers?
- C. If each of the 27 chapters in a book is 9 pages long, how many pages long is the book?
- D. If 9 pencils were taken from a pack of 27, how many pencils are left?
- E. If there are 27 students in each of 9 classrooms, how many students are in each classroom?

4

This question has two parts. First, answer part 1. Then, answer part 2.

**Part 1**

Which expression will find the number of golf balls in each box?



- A.  $4 \times 3$
- B.  $12 \div 4$
- C.  $4 + 3$
- D.  $12 - 4$

**Part 2**

Using either the numbers 4 and 3 or the numbers 12 and 4, write a story problem that asks to find the number of golf balls in each box.

# 5

Miss Soulli counted 36 music students. For a performance, she had 9 students stand in each row. Which two equations will find the number of rows Miss Soulli's music students stood in?

A.  $[?] \div 9 = 36$

B.  $[?] + 9 = 36$

C.  $9 \times [?] = 36$

D.  $36 - 9 = [?]$

E.  $36 \times 9 = [?]$

F.  $36 \div 9 = [?]$

## 6

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Sharon spent \$54 and bought 9 equal-priced tickets to the zoo. Which two equations will find the cost of one ticket?

A.  $[?] \times 9 = 54$

B.  $[?] - 9 = 54$

C.  $9 + [?] = 54$

D.  $54 - [?] = 9$

E.  $54 \div 9 = [?]$

F.  $54 + 9 = [?]$

# 7

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Which two equations are correctly completed by putting a 4 in the blank?

A.  $\_\_ \div 2 = 2$

B.  $\_\_ \div 4 = 4$

C.  $\_\_ \times 4 = 8$

D.  $\_\_ \times 6 = 24$

E.  $\_\_ \times 9 = 32$

# 8

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Which two equations are correctly completed by putting a 12 in the blank?

A.  $\_\_ \times 3 = 36$

B.  $\_\_ \div 4 = 3$

C.  $\_\_ \div 7 = 5$

D.  $6 \div \_\_ = 2$

E.  $6 \times \_\_ = 18$

F.  $8 \times 4 = \_\_$



# 9

Which two expressions are equal to the expression below?

$$10 \times 10 \times 5$$

A.  $100 \times 50$

B.  $100 \times 5$

C.  $50 \times 50$

D.  $50 \times 10$

E.  $50 + 50$

F.  $50 + 10$

# 10

Which two expressions are equal to the expression below?

$$9 \times 9$$

- A.  $(5 \times 4) + (5 \times 4)$
- B.  $(9 \times 5) + (9 \times 4)$
- C.  $(9 \times 10) - (9 \times 1)$
- D.  $(10 \times 10) - (1 \times 1)$
- E.  $(18 \times 2) + (18 \times 2)$

# 11

**This question has two parts. First, answer part 1. Then, answer part 2.**

## Part 1

Look at the statement.

Since  $[?] \times 8 = 32$ , we know \_\_\_\_\_.

Which number correctly represents the  $[?]$  in the statement above?

- A. 4
- B. 6
- C. 7
- D. 8

## Part 2

Which equation correctly fills in the blank in the statement above?

- A.  $32 \div 8 = 8$
- B.  $32 \div 8 = 4$
- C.  $32 \div 4 = 4$
- D.  $32 \div 6 = 7$

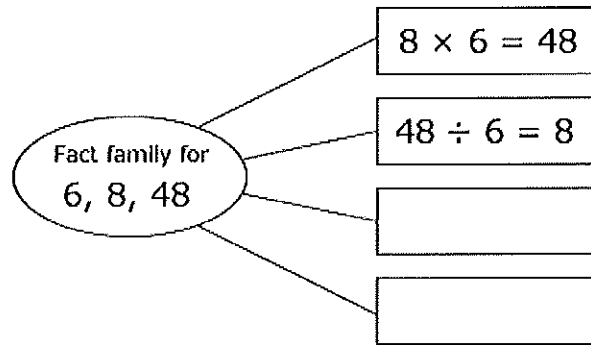
## 12

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$$234 \div 18 = [?]$$

Which two would help solve the problem above?

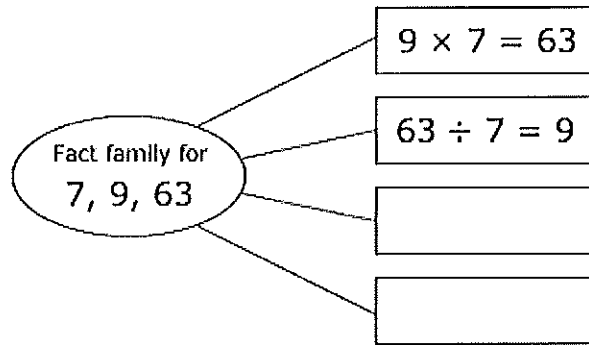
- A.  $[?] + 18 = 234$
- B.  $18 \times [?] = 234$
- C.  $234 \times [?] = 18$
- D.  $[?] \times 18 = 234$
- E.  $18 + [?] = 234$
- F.  $[?] \times 234 = 18$



## 13

Look at the fact family for 6, 8, and 48. Click on the two equations that correctly complete the fact family.

- |                 |                   |
|-----------------|-------------------|
| $6 \div 8 = 48$ | $48 \times 8 = 6$ |
| $6 \div 48 = 8$ | $8 \times 48 = 6$ |
| $8 \div 6 = 48$ | $6 \times 8 = 48$ |
| $8 \div 48 = 6$ | $48 \times 6 = 8$ |
| $48 \div 8 = 6$ | $6 \times 48 = 8$ |



## 14

Look at the fact family for 7, 9, and 63. Click on the two equations that correctly complete the fact family.

$7 \div 9 = 63$

$9 \div 63 = 7$

$7 \times 9 = 63$

$9 \times 63 = 7$

$7 \div 63 = 9$

$63 \div 9 = 7$

$7 \times 63 = 9$

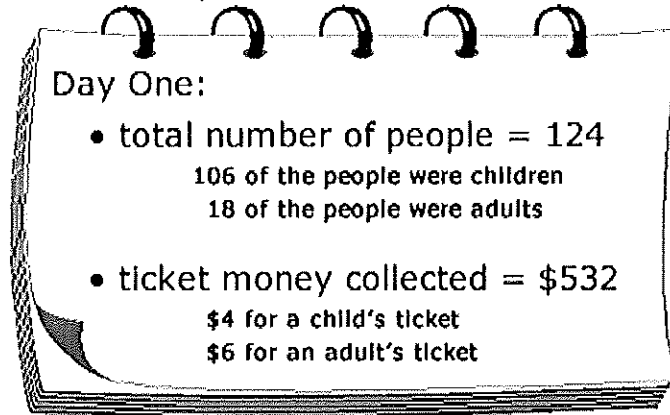
$63 \times 9 = 7$

$9 \div 7 = 63$

$63 \times 7 = 9$

## "Museum Tickets"

Julie is the manager of a local children's museum. She counted how many people went to the museum each day for a whole month. She also totaled up how much money was spent on admission tickets each day. Below are her records for the first day:



**15**

**This question has two parts. First, answer Part 1. Then, answer Part 2.**

### Part 1

from "Museum Tickets"

Mr. Kennison spent \$16 on tickets for his family. If he bought 1 child ticket, how many adult tickets did he buy?

- A. 6
- B. 5
- C. 3
- D. 2

### Part 2

from "Museum Tickets"

Which helps show how many adult tickets,  $A$ , Mr. Kennison bought?

- A.  $(16 - 4) \div 2 = A$
- B.  $(16 - 4) \div 6 = A$
- C.  $16 - 6 = A \times 2$

D.  $16 - 4 = A \times 4$



## 16

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Kristi started with \$51. Then, she spent \$33 on new clothes. Finally, she took what she had left and gave the same amount to each of her 2 sisters. Which two expressions would give Kristi the best estimate of how much money she gave to each of her sisters?

- A.  $(50 - 30) \div 0$
- B.  $(50 - 30) \div 2$
- C.  $(50 - 30) \div 5$
- D.  $(52 - 32) \div 2$
- E.  $(54 - 34) \div 4$

## "Tina's Number Pattern"

Tina created a pattern in a table using the number 6. Here is her table.

0	6	—	18	24
30	36	42	48	—
—	66	72	78	84
90	—			

**17**

from "Tina's Number Pattern"

Which are the last digits of the missing numbers from Tina's table?

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5
- G. 6
- H. 7
- I. 8
- J. 9

### "Tim's Number Pattern"

Tim created a pattern using the number 4. Here is his table.

0	4	8	12	16	20	24	—	32	36
40	—	48	52	56	60	64	68	72	76
80	84	88	92	96	—				

**18**

from "Tim's Number Pattern"

Which two statements are true about the numbers shown on Tim's table?

- A. All the numbers greater than 0 are odd.
- B. All the numbers greater than 0 are even.
- C. Only 3 of the numbers can be divided equally by 5.
- D. Only 4 of the two-digit numbers can be divided equally by 10.
- E. When reading down column two, the numbers increase by 4.

# 19

Solve each problem below. Which two answers, when multiplied together, equal 400?

A.  $40 \times 1 = \underline{\quad}$

B.  $10 \times 5 = \underline{\quad}$

C.  $10 \times 4 = \underline{\quad}$

D.  $8 \times 1 = \underline{\quad}$

E.  $4 \times 1 = \underline{\quad}$

Solve each problem below. Which two answers, when multiplied together, equal 180?

A.  $2 \times 3 = \underline{\quad}$

B.  $10 \times 1 = \underline{\quad}$

C.  $10 \times 3 = \underline{\quad}$

D.  $10 \times 6 = \underline{\quad}$

E.  $10 + 10 = \underline{\quad}$

F.  $30 + 60 = \underline{\quad}$