

Multiplication as Comparison Problems

Materials: Multiplication as Comparison cards

1. Work with a partner. Choose five problems that you will both solve.
2. Solve the problems independently.
3. After completing five problems share and discuss your solutions with a partner.
4. Repeat steps 1-3 until you have completed all problems in the set.

Draw a model and write an equation for the following:

- a) 18 is 3 times as many as 6
- b) 20 is 5 times as many as 4
- c) 80 is 4 times as many as 20

E

Draw a model and write an equation for the following:

- a) 3 times as many as 9 is 27
- b) 40 is 4 times as many as 10
- c) 21 is 3 times as many as 7

A

Write equations for the following:

- a) three times as many as four is twelve
- b) twice as many as nine is eighteen
- c) thirty-two is four times as many as eight

B

Write a comparison statement for each equation:

- a) $3 \times 7 = 21$
- b) $8 \times 3 = 24$
- c) $5 \times 4 = 20$

___ times as many as ___ is ___.

C

Write a comparison statement for each equation:

- a) $45 = 9 \times 5$
- b) $24 = 6 \times 4$
- c) $18 = 2 \times 9$

___ is ___ times as many as ___.

D

Draw a model and write an equation for the following:

- a) 18 is 3 times as many as 6
- b) 20 is 5 times as many as 4
- c) 80 is 4 times as many as 20

E

Write equations for the following:

- a) five times as many as seven is thirty-five
- b) twice as many as twelve is twenty-four
- c) four times as many as nine is thirty-six

F

Write a comparison statement for each equation:

- a) $6 \times 8 = 48$
- b) $9 \times 6 = 54$
- c) $8 \times 7 = 56$

___ times as many as ___ is ___.

G

Write a comparison statement for each equation:

- a) $72 = 9 \times 8$
- b) $81 = 9 \times 9$
- c) $36 = 4 \times 9$

___ is ___ times as many as ___.

H

Write a comparison statement for $42 = 6 \times 7$.
Use the words “times” and “more than.”

I

How are the equations for ‘4 is 2 more than 2’ and ‘4 is 2 times as many as 2’ different? Write an equation for each statement and explain your thinking using math vocabulary.

J

Draw models to represent:

$$21 = 7 \times 3 \quad \text{and} \quad 21 = 3 \times 7$$

How are the models alike? How are they different?

K

Write two different multiplication equations that have a product of 24. Write a comparison statement for each equation.

L

Write two multiplication equations in which both factors are even numbers. Write a comparison statement for each equation.

M

Write two multiplication equations in which both factors are odd numbers. Write a comparison statement for each equation.

N

Write an equation to represent the situation below. Let “p” be the unknown number.

Jack surveyed fourth graders about their favorite food. Thirty-two students chose pizza. Four times as many students chose pizza as chose pasta.

O

Write an equation to represent the situation below. Use “s” for the unknown.

Farmer Brown has 50 sheep. He has twice the number of sheep as Farmer Smith.

P