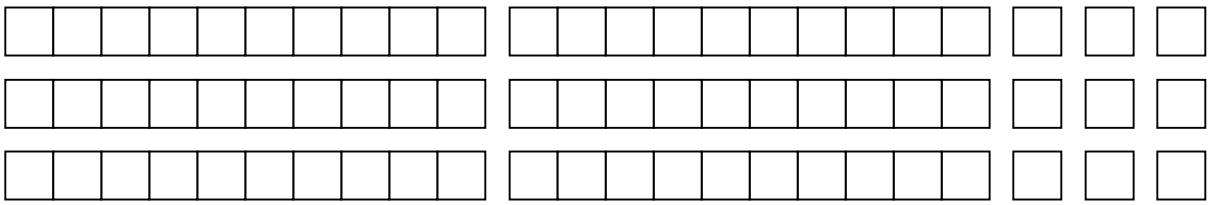
Pr1



Write 3 multiplication equations to find the total number of base 10 blocks above.

Pr3

Read this story problem.

There are 9 candies in each snack pack. Mary has 7 snack packs of candy. How many candies are there in all?

Which one of the following number sentences could be used to solve this problem?

A. 9 + 7 + 9 + 7 + 9 + 7 + 9

B. (9 x 3) + (9 x 4)

C. 7 + 7 + 7 + 7 + 7 + 7 + 7

D. (9 x 5) + (9 x 4)

Explain your thinking.

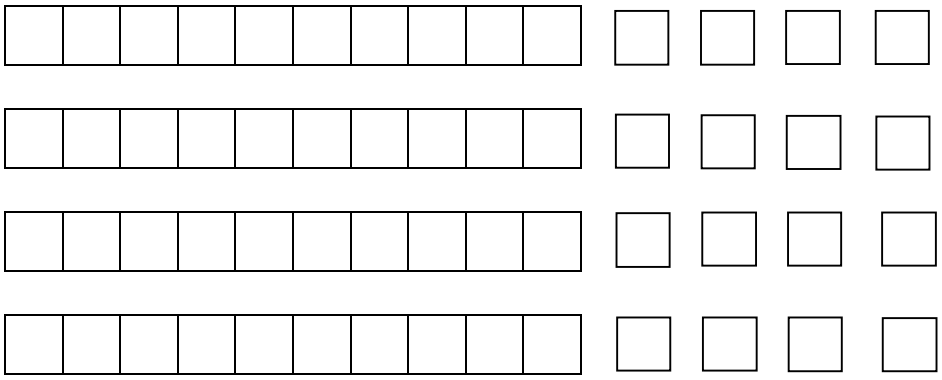
Pr4

Ann knows the answer to 9 x 5. How can she use this information to solve 45 ÷ 9?

Explain your thinking.

Pr5

Look at these base ten blocks.



Jack wrote this number sentence to solve the problem.

(10 x **4) + (4** x **4) = 56**

A. Label the picture of the base ten blocks above to show how Jack got his number sentence.

B. Write another multiplication sentence that could be used to represent the base ten blocks.

Pr7

Look at this number sentence.

16 x 8=

Billy knows that 16 x 2 is 32. How can he use this to solve the problem above?

Pr9

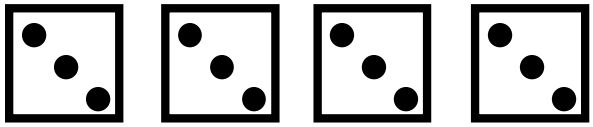
Look at this problem.

$$7 \times 6 =$$

Mara multiplied 7 x 3 to start to solve this problem. What else does she need to do to solve this problem?
Explain your thinking.

Pr10

Look at this picture.



Ben and Suzy wrote 2 different multiplication number sentences to figure out the number of dots in the picture.

Ben wrote 3 x 4 = 12
Suzy wrote 4 x 3 = 12

Do both number sentences work to figure out the number of dots in the picture? Explain your answer.

Pr11

What number goes in the ☐ to make this equation a true statement? Explain your answer.

$$7 \times 5 = \square \times 7$$

Pr12

Cara solved this problem.

2 x 9 x 5 = 90

To solve the problem she changed the order of the factors to:

2 x 5 x 9 =

Will Cara get the correct answer to the problem? Why or why not?

Pr13

What number goes in the □ to make this equation a true statement? Explain your answer.

$$3 \times 4 \times 2 = \square \times 2 \times 3$$

Pr15

Leo said that 2 x 6 is the same as 6 x 2 so 6 ÷ 2 must be the same as 2 ÷ 6.

Is Leo correct?

Explain why or why not.

Pr18

Mary knows **8 x 9 = 72.**

Explain to Mary how she can use this to find the answer to **800 x 90**.

Pr19

Simon knows that 40 ÷ 5 = 8.

Explain how Simon can use this to find the answer to 400 ÷ 5.

Pr21

Look at the number sentence.

34 x 42=

Sharon started to solve this problem by finding the answer to 34 x 2.

What more does she need to do to get the answer to 34 x 42? Explain you thinking.

Pr22

Read this story problem.

Each dog will get 3 treats. There are 12 treats in all. How many dogs are there?

Ben and Sara wrote 2 different division sentences to find out how many dogs there are.

Ben wrote 12 ÷ 3 =
Sara wrote 3 ÷ 12 =

Who is correct and why?

Pr23

1328 ÷ 4

Seth started to solve this problem by finding the answer to

1000 ÷ 4.

What more does Seth need to do to get the answer to 1328 ÷ 4?

Explain your thinking.

Pr24

Beth was solving this problem.

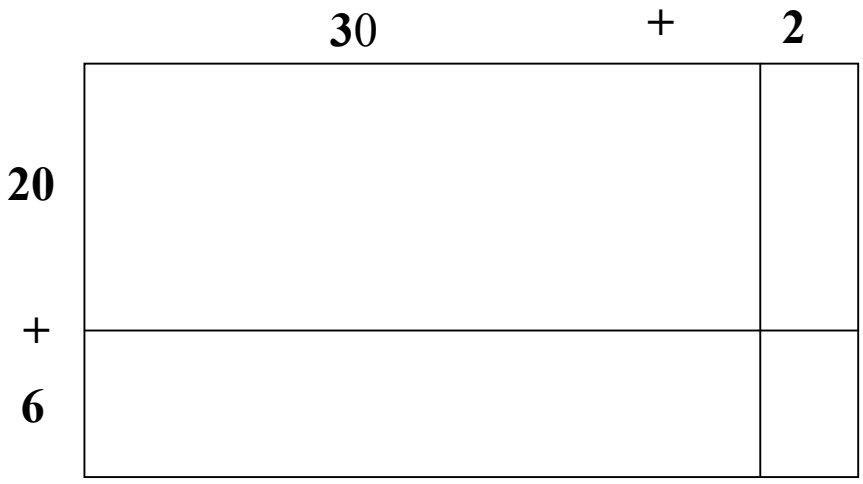
$$\mathbf{640 \div 4 =}$$

She knew that $640 \div 2 = 320$.

How can Beth use the information above to solve the problem **640 ÷ 4 = ?**

Pr25

Look at the model below.



Label the four rectangles with the multiplication equations that represent the partial products for the model.

In the space below **write and solve the equation** that matches the model. Show your work.

Equation: _____

Solution: _____

Pr30

Patty accidentally entered 78 x 41 into her calculator instead of 78 x 31. What is the amount that she would need to add or subtract to get the correct answer?

Explain your thinking.

Pr31

Matilda accidentally entered 45 x 45 into her calculator instead of 35 x 45. What is the amount that she would need to add or subtract to get the correct answer?

Explain your thinking.

Pr32

Review the following true equations.

a) 786 x 5 x 2 = 10 x 786

b) 5 x 20 x 3 = 3 x 5 x 20

c) 45 x 5 x 4 = 4 x 5 x 45

1) Write a general statement as to why these equations are true.

2) Write another equation that fits into this group of equations.

Pr33

Complete each of these equations to make them TRUE statements.

$$50 \times \_\_\_\_ = 375$$

$$375 \div \_\_\_ = 7.5$$

Explain how the completed equations are related to each other.

Pr34

Abdi was stacking boxes that are 14 inches tall next to boxes that are 12 inches tall. Abdi wants to make both stacks the same height. What is the shortest height that the two stacks will be the same?

Show your work.

Pr35

Kelyn baked 40 cookies and 64 brownies. She plans on bagging the cookies and brownies to sell at a bake sale. Each bag will contain both brownies and cookies.

a) If Kelyn uses all the cookies and brownies and every bag has the same number of brownies and the same number of cookies, what is the most number of bags she can she fill?
(Hint: The number of brownies and cookies in each bag will not be the same.)
Show your work.

b) How many brownies and cookies will be in each bag? Show your work.

Pr36

Matilda accidentally entered 4500 ÷ 5 into her calculator instead of 4500 ÷ 10. What is the amount that she would need to add or subtract to get the correct answer?

Show your work.

Pr37

Choose correct or incorrect to indicate if each of the equations below are true.

5 x 700 = 100 x 350	Correct ◯	Incorrect ◯
25 x 8 x 4 = 100 x 8	Correct ◯	Incorrect ◯
342 x 286 = 286 x 342	Correct ◯	Incorrect ◯

For each equation that you indicated is correct explain why.

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Pr39

Choose correct or incorrect to indicate if each of the equations below are true.

538 x 1 = (5 x 100) + (3 x 10) + (8 x 1)	Correct ◯	Incorrect ◯
6452 x 1 = 1 x 6452	Correct ◯	Incorrect ◯

For each equation that you indicated is correct explain why.

Pr40

Complete each of these equations to make them TRUE statements.

$$90 \times \_\_\_ = 720$$

$$720 \div \_\_\_ = 8$$

Explain how the completed equations are related to each other.

Pr41

Complete each of these equations to make them true statements.

1) 30 x 71 = 71 x ____

2) (70 x 80) x 3 = ____ x (80 x 3)

Pr42

Complete each of these equations to make them true statements.

Show your work.

1) ___ x (10 + 3) = (2 x 10) + (2 x 3)

2) (68 + ____) x 4 = (68 x 4) + (20 x 4)

Pr43

Sam made the following statement.

"The number 24 is a multiple of 8. That means that all of the factors of 8 are also factors of 24."

Is Sam correct? Explain why or why not.

Pr44

Kaitlyn made the following statement.

"The number 36 is a multiple of 12. That means that all of the factors of 12 are also factors of 36."

Is Kaitlyn correct? Explain why or why not.

Pr45

Roger accidentally entered 45 x 236 into his calculator instead of 35 x 236. What is the amount that he would need to add or subtract to get the correct answer?

Explain your thinking.

Pr46

Kim said that 3.4 x 100 = 340.

Chris said that 3.4 x 100 = 3,400.

Who is correct and why?

Pr47

Kim said that $3.5 \div 100 = 0.35$

Chris said that $3.5 \div 100 = 0.035$

Who is correct and why?

Pr48

Ann and Billy baked 60 cookies for the bake sale. They put them on 5 plates.
They wanted to know how many cookies to put on each plate.

Ann used this number sentence:

5 x ☐ = 60

Billy used this number sentence:

60 ÷ 5 =

Explain why both these number sentences will work.

Pr49

Write a multiplication equation that could be used to find the answer to this problem.

$$42 \div 6 = \square$$

Pr50

To find the answer to **4 x 7** Tom decided to skip count by fours 7 times.

1 5 9 13 17 21 25

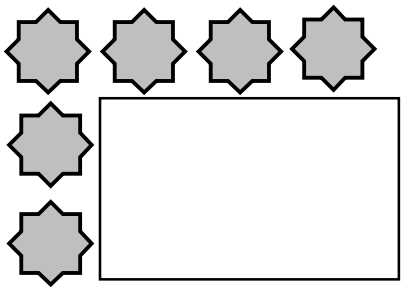
When Tom finishes he says the answer to 4 x 7 is 25.

A) Explain why Tom's skip counting pattern does not work for finding the answer to 7 x 4.

B) Write the correct skip counting pattern to answer 4 x 7.

Pr51

Julia made the array shown below out of stars.
You cannot see all the stars Julia used because she covered part of the array with a piece of paper.



How many total stars did Julia use in her array.

Show how you know.

Pr52

Complete each of these equations to make them TRUE statements.

$$61 \times \_\_\_ = 732$$

$$732 \div \_\_\_ = 12$$

Explain how the completed equations are related to each other.

Pr53

Complete each of these equations to make them TRUE statements.

$$234 \times \_\_\_\_ = 5382$$

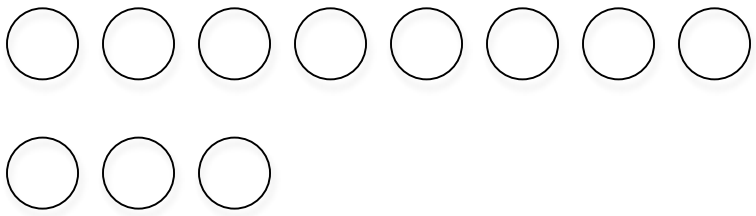
$$\_\_\_\_\_ \div 23 = 234$$

Explain how the completed equations are related to each other.

Pr54

The teacher asked Sue to draw an array to represent 7 x 3.

Sue drew this.



Sue said she was done.

A) Explain what is wrong with Sue's thinking.

B) Fix Sue's drawing.