



Intriguing Inverses

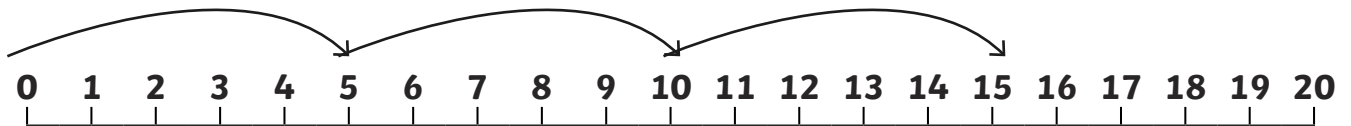
I can write inverse multiplication and division sentences for the 2, 5 and 10 times tables.



1. Can you write inverses for these multiplication statements to get back to where you started? The first one is done for you.

Explain what you have done and why to your teacher using equipment.

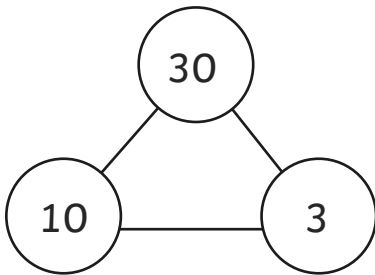
a. $3 \times 5 = 15$ $15 \div 5 = 3$



b. $10 \times 2 = 20$ $\square \div \square = 10$

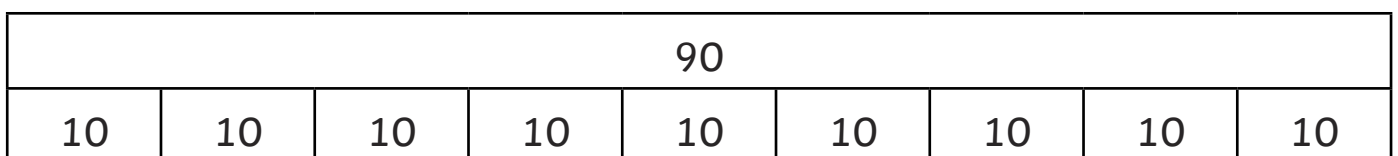


c. $3 \times 10 = 30$ $\square \div \square = 3$



2. Can you write inverses for these division statements to get back to where you started? The first one is done for you.

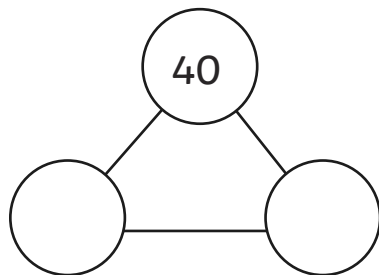
a. $90 \div 10 = 9$ $9 \times 10 = 90$





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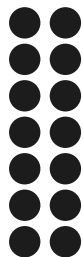
b. $40 \div 5 = 8$ $\square \times 5 = \square$



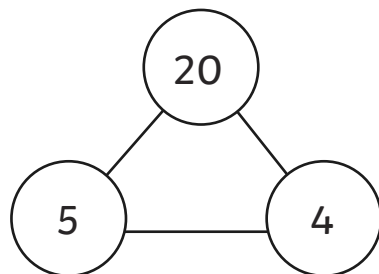
c. $18 \div 2 = 9$ $\square \times \square = \square$



3. Write a multiplication and a division sentence for what you see here.



a. $\square \times \square = \square$ $\square \div \square = \square$



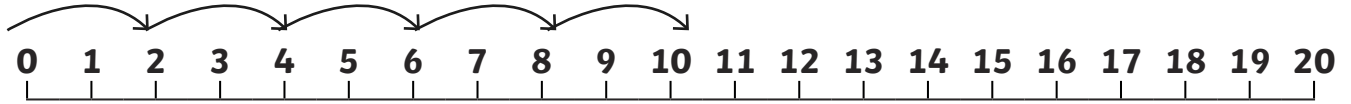
b. $\square \times \square = \square$ $\square \div \square = \square$



Answers

1. a. $3 \times 5 = 15$, $15 \div 5 = 3$

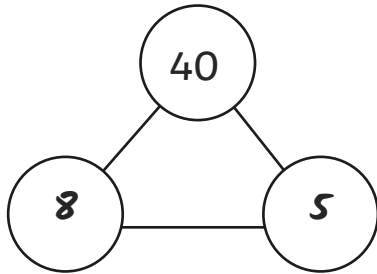
b. $10 \times 2 = 20$, $20 \div 2 = 10$



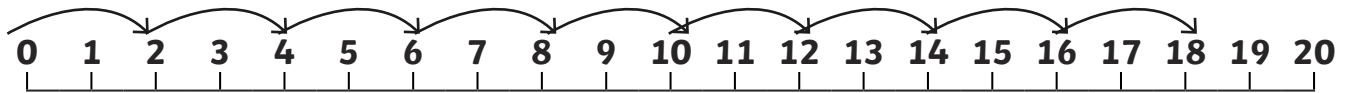
c. $3 \times 10 = 30$, $30 \div 10 = 3$

2. a. $90 \div 10 = 9$, $9 \times 10 = 90$

b. $40 \div 5 = 8$, $8 \times 5 = 40$



c. $18 \div 2 = 9$, $9 \times 2 = 18$



3. a. $7 \times 2 = 14$, $14 \div 2 = 7$

b. $4 \times 5 = 20$, $20 \div 5 = 4$



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I can write inverse multiplication and division sentences for the 2, 5 and 10 times tables.

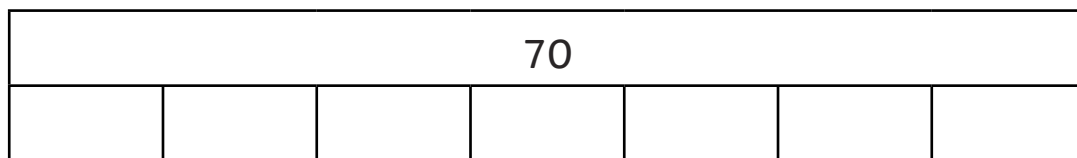


Write the inverse statement for each multiplication or division sentence and fill in any gaps in the information.

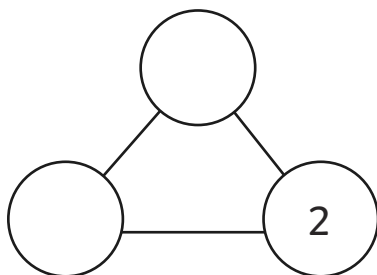
1. $4 \times 5 = 20$ _____



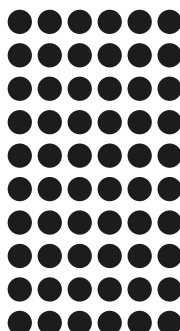
2. $70 \div 10 = 7$ _____



3. $18 \div 2 =$ _____



4. Write a multiplication and a division sentence for what you see here.





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5. Write a multiplication and a division sentence for what you see here.

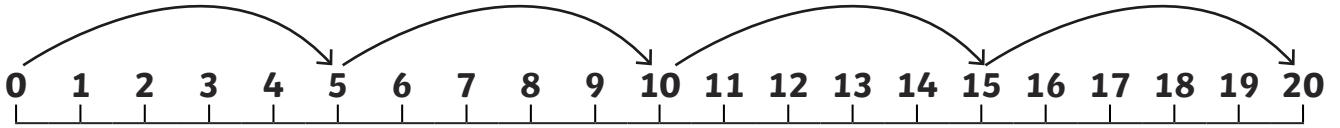
24											
2	2	2	2	2	2	2	2	2	2	2	2

6. Can you make an array with counters and describe it to a friend using inverses? Draw the array and your inverses here.

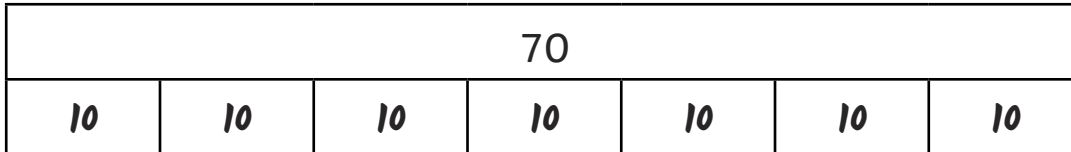


Answers

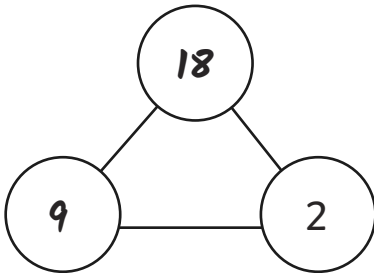
1. $20 \div 5 = 4$



2. $7 \times 10 = 70$



3. $9 \times 2 = 18$



4. $6 \times 10 = 60$, $60 \div 10 = 6$

5. $12 \times 2 = 24$, $24 \div 2 = 12$

6. Accept any sentences that match the array.



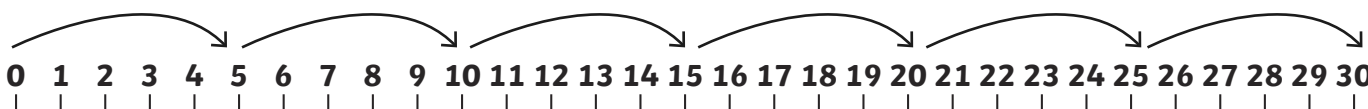
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I can write inverse multiplication and division sentences for the 2, 5 and 10 times tables.

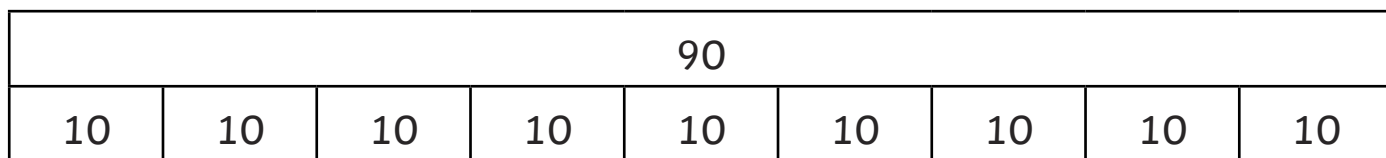


Write 2 inverse statements to match what you see.

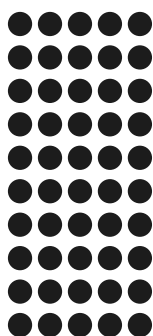
1. _____



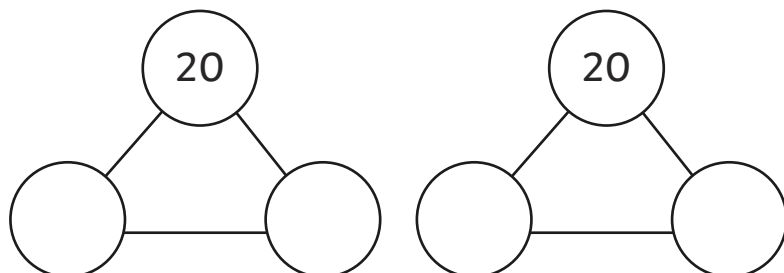
2. _____



3. Write a multiplication and a division sentence for what you see here.



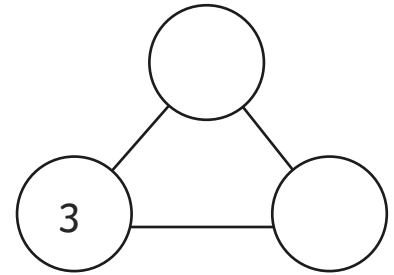
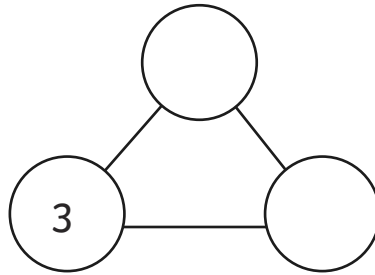
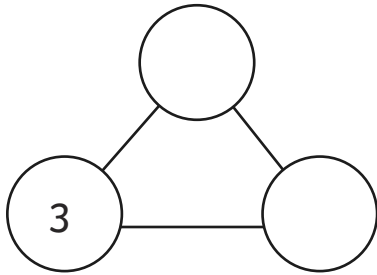
4. Fill in the part whole diagram and write number sentences to match what you have written. Find 2 different ways to do this.





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5. How many different ways can you find to fill this part whole diagram? You may need to draw some more. Write number sentences to match what you have written.



6. Can you make a puzzle for a friend using a diagram or an array?



Answers

1. $7 \times 5 = 35, 35 \div 5 = 7$
2. $9 \times 10 = 90, 90 \div 10 = 9$
3. $10 \times 5 = 50, 50 \div 5 = 10$
4. Answers may include $2 \times 10 = 20, 20 \div 10 = 2; 4 \times 5 = 20, 20 \div 5 = 4$
Accept any other possibilities.
5. $3 \times 2 = 6, 6 \div 2 = 3$
 $3 \times 5 = 15, 15 \div 5 = 3$
 $3 \times 10 = 30, 30 \div 10 = 3$
 $3 \times 3 = 9, 9 \div 3 = 3$
Accept any other possibilities.
6. Accept any sentences that match the diagram or array they have chosen.