

# Lesson 3 – Multiplication – Add Equal Groups

**NC Objective:**  
Solve problems involving multiplication and division, using materials, arrays, repeated addition and multiplication and division facts, including problems in context.

**Resources needed:**  
Differentiated Sheets  
Teaching Slides  
Objects to make equal and unequal groups

**Vocabulary:**  
Repeated addition, multiplication, equal, unequal, represent

Children begin to connect equal groups to repeated addition.  
At this point children have added 3 one digit numbers together, therefore they can add up to 3 equal groups when each group is any one digit number.  
If there are more than 3 equal groups, the examples must be limited to 2s, 5s, 10s and 3s.

**Key Questions:**

- What do the two 3s represent?
- Why are we using the addition symbol?
- How else can we show the equal groups?
- What is the total?

★ Working Towards

★★ Working Within

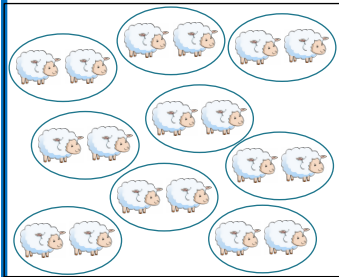
★★★ Greater Depth

Children start to relate equal groups to repeated addition. They add 2s, 3s, 5s and 10s with given marks to create the repeated addition sentence.  
  
There are 2 sheets to choose from based on preference of layout.

Children start to relate equal groups to repeated addition. They add 2s, 3s, 5s and 10s.  
  
There are 2 sheets to choose from based on preference of layout.

Children start to relate equal groups to repeated addition. They add 2s, 3s, 5s and 10s.  
  
Children answer true or false questions by drawing and adding to prove their answer.

## Reasoning & Problem Solving

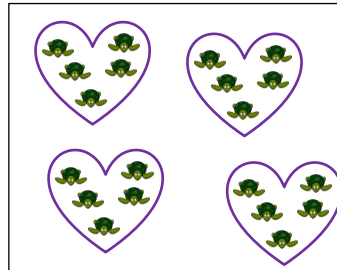


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ + \_\_\_ = \_\_\_ \end{aligned}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.

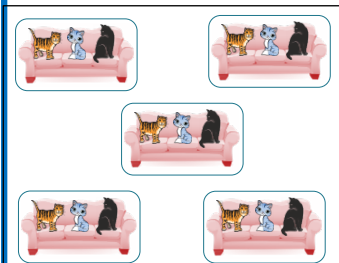


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ = \_\_\_ \end{aligned}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.

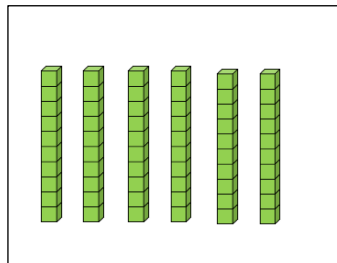


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ = \_\_\_ \end{aligned}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.

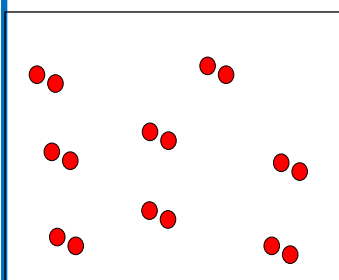


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ + \_\_\_ = \\ & \_\_\_ \end{aligned}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.

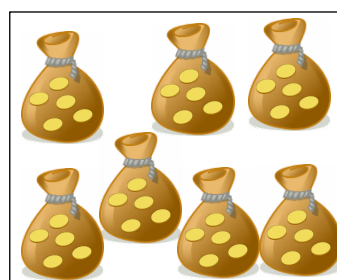


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ = \_\_\_ \end{aligned}$$

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There are \_\_\_\_\_.

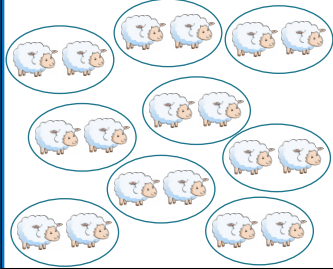


Draw it

Add it

$$\begin{aligned} & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ + \_\_\_ + \_\_\_ + \\ & \_\_\_ = \_\_\_ \end{aligned}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.



Draw it

Add it

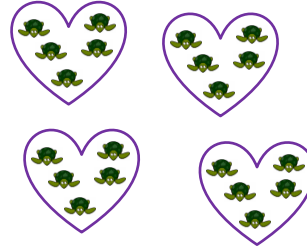
$$\underline{2} + \underline{2} + \underline{2} +$$

$$\underline{2} + \underline{2} + \underline{2} +$$

$$\underline{2} + \underline{2} + \underline{2} = \underline{18}$$

There are 9 equal  
groups with 2 in  
each group.

There are 18.



Draw it

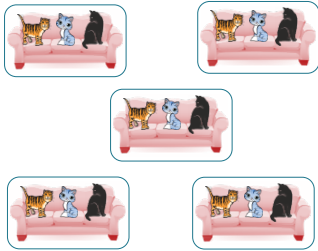
Add it

$$\underline{5} + \underline{5} + \underline{5} +$$

$$\underline{5} = \underline{20}$$

There are 4 equal  
groups with 5 in  
each group.

There are 20.



Draw it

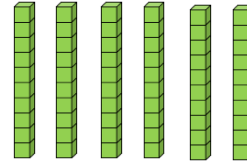
Add it

$$\underline{3} + \underline{3} + \underline{3} +$$

$$\underline{3} + \underline{3} = \underline{15}$$

There are 5 equal  
groups with 3 in  
each group.

There are 15.



Draw it

Add it

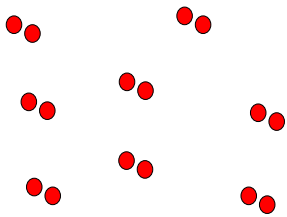
$$\underline{10} + \underline{10} + \underline{10} +$$

$$\underline{10} + \underline{10} + \underline{10} =$$

$$\underline{60}$$

There are 6 equal  
groups with 10 in  
each group.

There are 60.



Draw it

Add it

$$\underline{2} + \underline{2} + \underline{2} +$$

$$\underline{2} + \underline{2} + \underline{2} +$$

$$\underline{2} + \underline{2} = \underline{16}$$

There are 8 equal  
groups with 2 in  
each group.

There are 16.



Draw it

Add it

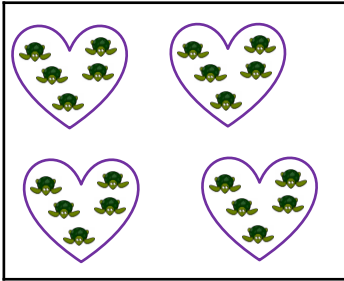
$$\underline{5} + \underline{5} + \underline{5} +$$

$$\underline{5} + \underline{5} + \underline{5} +$$

$$\underline{5} = \underline{35}$$

There are 7 equal  
groups with 5 in  
each group.

There are 35.



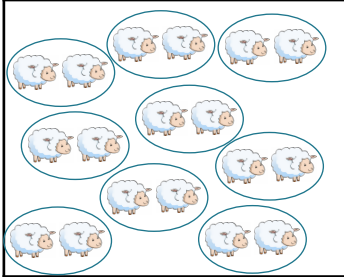
Draw it

Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.



Draw it

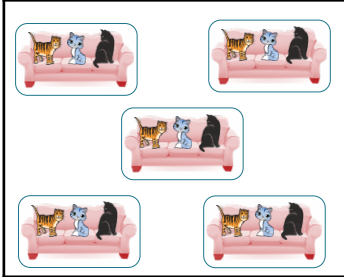
Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

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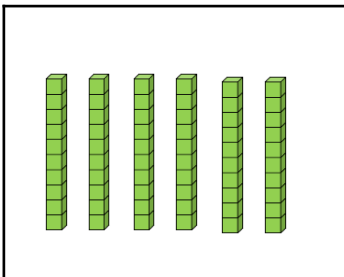
Draw it

Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
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Draw it

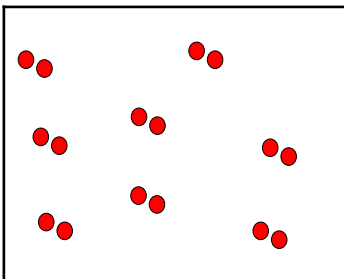
Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
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Draw it

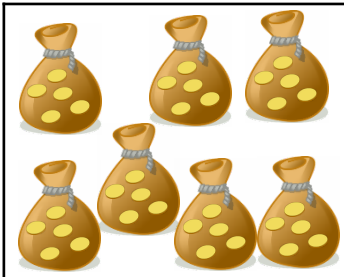
Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
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Draw it

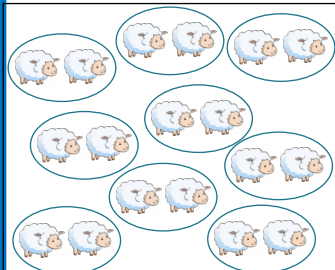
Add it

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$\underline{\quad} = \underline{\quad}$$

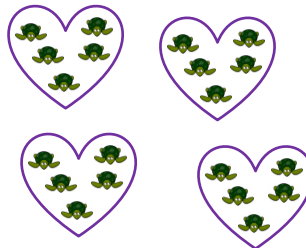
There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.



Draw it

Add it

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
There are \_\_\_\_\_.



Draw it

Add it

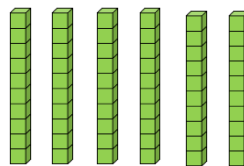
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Draw it

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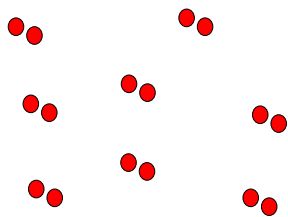
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Draw it

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Draw it

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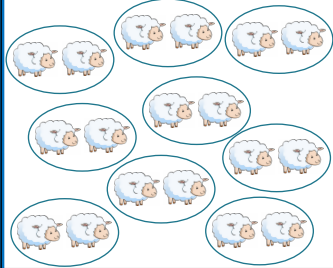
There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.  
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Draw it

Add it

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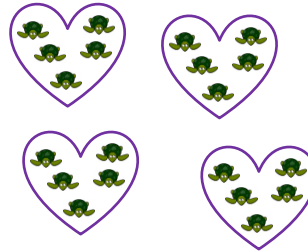


Draw it

Add it

$$\begin{array}{r} 2 + 2 + 2 + 2 \\ + 2 + 2 + 2 + 2 \\ + 2 = 18 \end{array}$$

There are 9 equal  
groups with 2 in  
each group.  
There are 18.

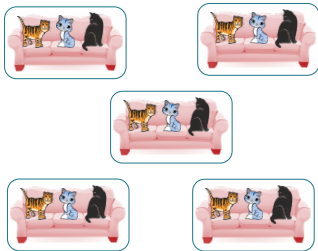


Draw it

Add it

$$\begin{array}{r} 5 + 5 + 5 + 5 \\ = 20 \end{array}$$

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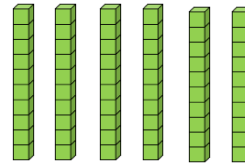


Draw it

Add it

$$\begin{array}{r} 3 + 3 + 3 + 3 \\ + 3 = 15 \end{array}$$

There are 5 equal  
groups with 3 in  
each group.  
There are 15.

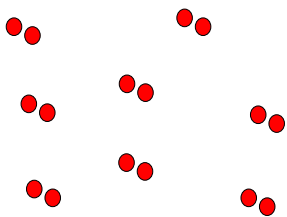


Draw it

Add it

$$\begin{array}{r} 10 + 10 + 10 + \\ 10 + 10 + 10 = 6 \\ 0 \end{array}$$

There are 6 equal  
groups with 10 in  
each group.  
There are 60.



Draw it

Add it

$$\begin{array}{r} 2 + 2 + 2 + 2 \\ + 2 + 2 + 2 + 2 \\ = 16 \end{array}$$

There are 8 equal  
groups with 2 in  
each group.  
There are 16.

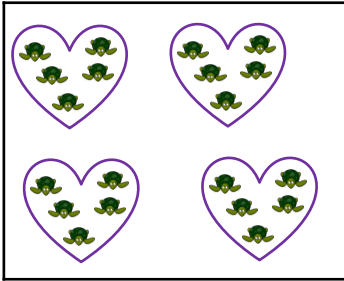


Draw it

Add it

$$\begin{array}{r} 5 + 5 + 5 + \\ 5 + 5 + 5 + \\ 5 = 35 \end{array}$$

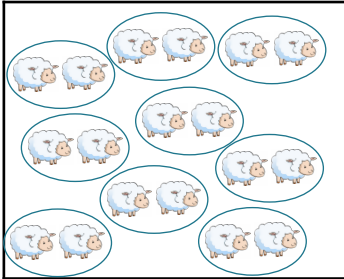
There are 7 equal  
groups with 5 in  
each group.  
There are 35.



Draw it

Add it

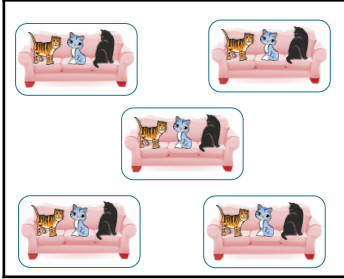
There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



Draw it

Add it

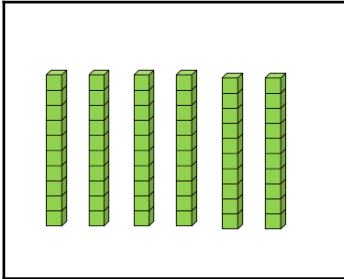
There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



Draw it

Add it

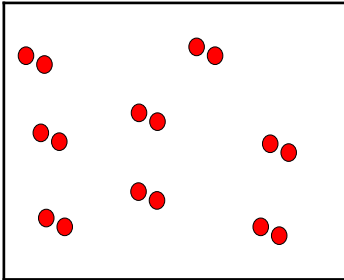
There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



Draw it

Add it

There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



Draw it

Add it

There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



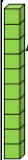





Draw it







Add it

There are \_\_\_\_ equal groups with \_\_\_\_ in each group.  
There are \_\_\_\_.



<p>I have seven equal groups of 5 coins.</p> <p>Altogether, I have 25 coins.</p> <p>True or false?</p> 	Draw it	Add it	True or false?
<p>There are nine equal groups of 2 sheep.</p> <p>Altogether, there are 18 sheep.</p> <p>True or false?</p> 	Draw it	Add it	True or false?
<p>There is one group of 10 cubes.</p> <p>Altogether, there is 1 cube.</p> <p>True or false?</p> 	Draw it	Add it	True or false?
<p>There are four groups of three cats.</p> <p>Altogether, there are 9 cats.</p> <p>True or false?</p> 	Draw it	Add it	True or false?
<p>The teacher has twelve equal groups of four counters.</p> <p>Altogether, the teacher has 30 counters.</p> <p>True or false?</p> 	Draw it	Add it	True or false?
<p>There are eight equal groups of five turtles.</p> <p>Altogether, there are 14 turtles.</p> <p>True or false?</p> 	Draw it	Add it	True or false?



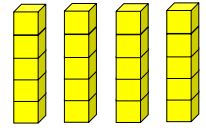
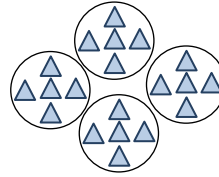
<p>I have seven equal groups of 5 coins.</p> <p>Altogether, I have 25 coins.</p> <p>True or false? </p>	Draw it	<p>Add it</p> $5 + 5 + 5 + 5$ $+ 5 + 5 + 5 = 13$ $5$	<p>True or false?</p> <p><b>False</b></p>
<p>There are nine equal groups of 2 sheep.</p> <p>Altogether, there are 18 sheep.</p> <p> True or false?</p>	Draw it	<p>Add it</p> $2 + 2 + 2 + 2$ $+ 2 + 2 + 2 + 2$ $+ 2 = 18$	<p>True or false?</p> <p><b>True</b></p>
<p>There is one group of 10 cubes.</p> <p> Altogether, there is 1 cube.</p> <p>True or false?</p>	Draw it	<p>Add it</p> $10 = 10$	<p>True or false?</p> <p><b>False</b></p>
<p>There are four groups of three cats.</p> <p>Altogether, there are 9 cats.</p> <p> True or false?</p>	Draw it	<p>Add it</p> $3 + 3 + 3 + 3$ $= 12$	<p>True or false?</p> <p><b>False</b></p>
<p>The teacher has twelve equal groups of four counters.</p> <p>Altogether, the teacher has 30 counters.</p> <p>True or false? </p>	Draw it	<p>Add it</p> $4 + 4 + 4 + 4$ $+ 4 + 4 + 4 +$ $4 + 4 + 4 + 4$ $+ 4 = 48$	<p>True or false?</p> <p><b>False</b></p>
<p>There are eight equal groups of five turtles.</p> <p>Altogether, there are 14 turtles.</p> <p> True or false?</p>	Draw it	<p>Add it</p> $5 + 5 + 5 + 5$ $+ 5 + 5 + 5 +$ $5 = 48$	<p>True or false?</p> <p><b>False</b></p>

True or False?

$$4 + 4 = 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.

Which is the odd one out?



Four 5s

twenty

$$5 + 5 + 5 + 5$$



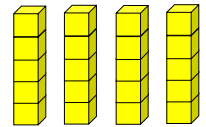
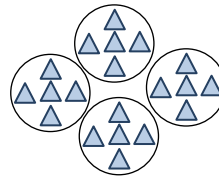
What is necessary to do to make them all represent the same?

True or False?

$$4 + 4 = 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.

Which is the odd one out?



Four 5s

twenty

$$5 + 5 + 5 + 5$$



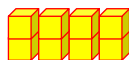
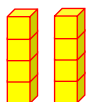
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True or False?

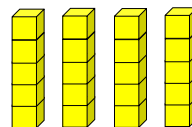
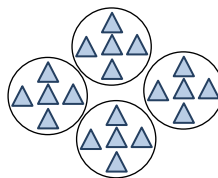
$$4 + 4 = 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.



True, but the groups seem different. The left side of the 'equal to' sign represents 2 groups of 4 and the right side represents 4 groups of 2.

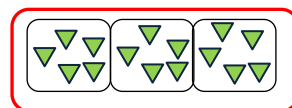
Which is the odd one out?



Four 5s

twenty

$$5 + 5 + 5 + 5$$



What is necessary to do to make them all represent the same?

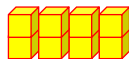
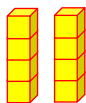
The three 5s. We need to add one group with 5 triangles in to make them represent the same.



True or False?

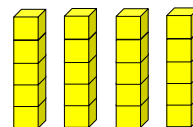
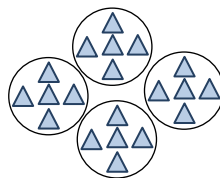
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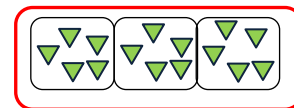
Which is the odd one out?



Four 5s

twenty

$$5 + 5 + 5 + 5$$



What is necessary to do to make them all represent the same?

The three 5s. We need to add one group with 5 triangles in to make them represent the same.

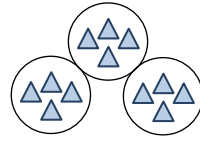


True or False?

$$8 + 8 = 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.

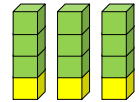
Which is the odd one out?



Four 3s

$$4 + 4 + 4$$

Twelve



What is necessary to do to make them all represent the same?

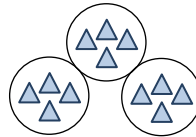


True or False?

$$8 + 8 = 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.

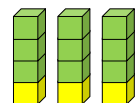
Which is the odd one out?



Four 3s

$$4 + 4 + 4$$

Twelve



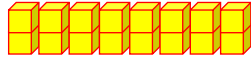
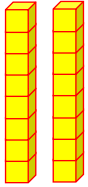
What is necessary to do to make them all represent the same?



True or False?

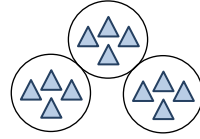
$$8 + 8 = 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.



True, but the groups seem different. The left side of the 'equal to' sign represents 2 groups of 8 and the right side represents 8 groups of 2.

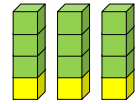
Which is the odd one out?



Four 3s

Twelve

$$4 + 4 + 4$$



What is necessary to do to make them all represent the same?

Four 3s.

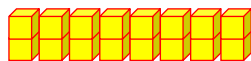
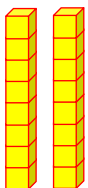
It should be three 4s, then they would be the same.



True or False?

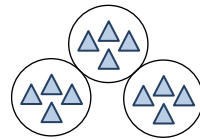
$$8 + 8 = 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

Draw an image or use cubes to help you explain your answer.



True, but the groups seem different. The left side of the 'equal to' sign represents 2 groups of 8 and the right side represents 8 groups of 2.

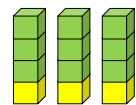
Which is the odd one out?



Four 3s

Twelve

$$4 + 4 + 4$$



What is necessary to do to make them all represent the same?

Four 3s.

It should be three 4s, then they would be the same.

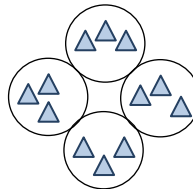


True or False?

$$5 + 5 + 5 = 3 + 3 + 3 + 3 + 3$$

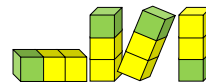
Draw an image or use cubes to help you explain your answer.

Which is the odd one out?



Four 3s

$$3 + 3 + 3 + 3$$



Twelve less than twenty-four



What is necessary to do to make them all represent the same?

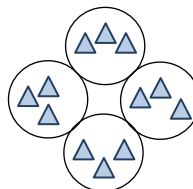


True or False?

$$5 + 5 + 5 = 3 + 3 + 3 + 3 + 3$$

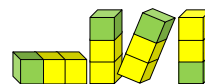
Draw an image or use cubes to help you explain your answer.

Which is the odd one out?



Four 3s

$$3 + 3 + 3 + 3$$



Twelve less than twenty-four



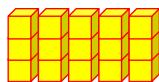
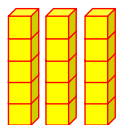
What is necessary to do to make them all represent the same?



True or False?

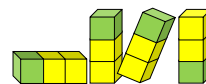
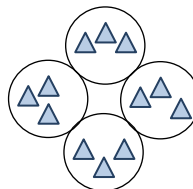
$$5 + 5 + 5 = 3 + 3 + 3 + 3 + 3$$

Draw an image or use cubes to help you explain your answer.



True, but the groups seem different. The left side of the 'equal to' sign represents 3 groups of 5 and the right side represents 5 groups of 3.

Which is the odd one out?



Four 3s

Twelve less than twenty-four

$$3 + 3 + 3 + 3$$



What is necessary to do to make them all represent the same?

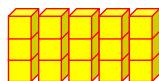
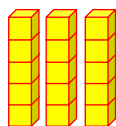
The four groups with green triangles. The triangle in the third group is a different type of triangle. To make them the same, we would need to replace this triangle with an equilateral one.



True or False?

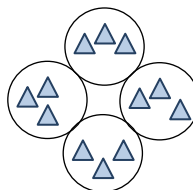
$$5 + 5 + 5 = 3 + 3 + 3 + 3 + 3$$

Draw an image or use cubes to help you explain your answer.



True, but the groups seem different. The left side of the 'equal to' sign represents 3 groups of 5 and the right side represents 5 groups of 3.

Which is the odd one out?



Four 3s

Twelve less than twenty-four

$$3 + 3 + 3 + 3$$



What is necessary to do to make them all represent the same?

The four groups with green triangles. The triangle in the third group is a different type of triangle. To make them the same, we would need to replace this triangle with an equilateral one.