

Name

MY Homework

Lesson 6

Divide by 8 and 9

Homework Helper

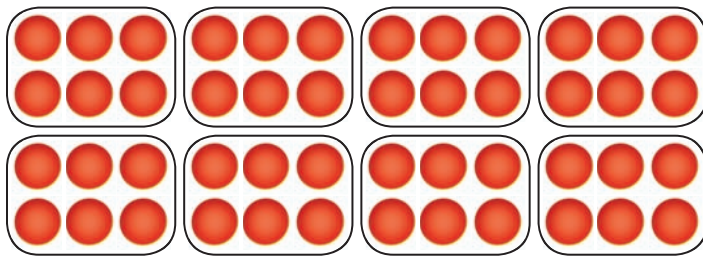


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Samantha bought a set of silverware with 48 pieces. She divides the pieces evenly among 8 sections of a tray. How many pieces of silverware are in each section of the tray?

One Way Use counters to partition.

Use 48 counters to model dividing evenly among 8 groups.



There are 6 counters in each group.

Another Way Use repeated subtraction.

$$\begin{array}{r}
 \textcircled{1} \\
 48 \\
 - 8 \\
 \hline
 40
 \end{array}
 \begin{array}{r}
 \textcircled{2} \\
 40 \\
 - 8 \\
 \hline
 32
 \end{array}
 \begin{array}{r}
 \textcircled{3} \\
 32 \\
 - 8 \\
 \hline
 24
 \end{array}
 \begin{array}{r}
 \textcircled{4} \\
 24 \\
 - 8 \\
 \hline
 16
 \end{array}
 \begin{array}{r}
 \textcircled{5} \\
 16 \\
 - 8 \\
 \hline
 8
 \end{array}
 \begin{array}{r}
 \textcircled{6} \\
 8 \\
 - 8 \\
 \hline
 0
 \end{array}$$

8 is subtracted 6 times.

$48 \div 8 = 6$. So, there were 6 pieces of silverware in each section.

Practice

Use counters to find the number of equal groups or the number in each group.

1. 27 counters
9 equal groups

3 in each group

So, $27 \div 9 = \underline{3}$.

2. 54 counters

9 equal groups
6 in each group

So, $54 \div \underline{9} = 6$.

3. 32 counters
8 equal groups

4 in each group

So, $32 \div 8 = \underline{4}$.

4. Use repeated subtraction to divide.

$$63 \div 9 = \underline{7}$$

$$\begin{array}{r} 63 \\ -9 \\ \hline 54 \end{array} \begin{array}{r} 54 \\ -9 \\ \hline 45 \end{array} \begin{array}{r} 45 \\ -9 \\ \hline 36 \end{array} \begin{array}{r} 36 \\ -9 \\ \hline 27 \end{array} \begin{array}{r} 27 \\ -9 \\ \hline 18 \end{array} \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array} \begin{array}{r} 9 \\ -9 \\ \hline 0 \end{array}$$

Algebra Use the inverse operation to find each unknown.

5. $16 \div 8 = \blacksquare$

$$\blacksquare \times 8 = 16$$

$$\blacksquare = \underline{2}$$

6. $\blacksquare \div 9 = 4$

$$4 \times 9 = \blacksquare$$

$$\blacksquare = \underline{36}$$

7. $64 \div 8 = \blacksquare$

$$\blacksquare \times 8 = 64$$

$$\blacksquare = \underline{8}$$



Problem Solving

Mathematical PRACTICE



2 Use Algebra For Exercises 8 and 9, write a division sentence with a symbol for the unknown. Then solve.

8. Michael, the chef, has 18 pineapple slices to divide evenly among 9 fruit cups. How many pineapple slices will he put in each cup?

$$\underline{18 \div 9 = \blacksquare; 2 \text{ pineapple slices}}$$

9. Kayla counted 40 chairs in the auditorium. There were 8 chairs in each row. How many rows of chairs were there?

$$\underline{40 \div 8 = \blacksquare; 5 \text{ rows}}$$

10. Simon sold 72 packages of popcorn for the fundraiser. There are 9 packages in each box. If he has delivered 27 packages, how many boxes does Simon have left to deliver?

$$\underline{5 \text{ boxes}}$$

Test Practice

11. Which number sentence uses the inverse operation to find the unknown in the division sentence $81 \div 9 = \blacksquare$?

(A) $90 - 9 = 81$

(C) $8 \times 9 = 72$

(B) $72 + 9 = 81$

(D) $9 \times 9 = 81$