• Problem Solving with Fractions •

In each exercise, restate the question using the given information and use question marks for any unknowns. Then find the answer.

Write all fractional answers in lowest terms.

1) A candy store sells mints, taffy, and caramel. If $\frac{5}{8}$ of the candy in stock is mints and $\frac{3}{16}$ of the candy in stock is taffy, what part of the candy in stock is caramel?

RESTATED QUESTION: $\underset{\text{PART MINTS}}{\_\_\_\_} + \underset{\text{PART TAFFY}}{\_\_\_\_} + \underset{\text{PART CARAMEL}}{\_\_\_\_} = 1$

[The WHOLE (1) = the *sum* of its *parts* (the MINTS, the TAFFY, and the CARAMEL).]

ANSWER: So, _____ of the candy in stock is caramel.

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2) One pint is $\frac{1}{8}$ of a gallon. What part of a gallon is 3 pints?

RESTATED QUESTION (STEP 1): 3 pints = $\frac{1}{8}$ of a gallon, ☐ times

(STEP 2): $\frac{1}{8}$, ☐ times = _____

ANSWER: So, 3 pints is _____ of a gallon.

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3) One–fifth of a chocolate chip cookie has 30 calories. How many calories are in the whole cookie?

RESTATED QUESTION: $\underset{\text{WHAT PART}}{\_\_\_\_}$ of $\underset{\text{THE WHOLE}}{\_\_\_\_}$ = 30 calories

ANSWER: So, there are _____ calories in the whole cookie.

LIVEWORKSHEETS

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1) One–fifth of a pound of candy costs $1.50. How much does a whole pound of candy cost?

RESTATED QUESTION: _____ (WHAT PART) of _____ (THE WHOLE) = $1.50

ANSWER: So, a whole pound of candy costs _____.

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2) A cup is $\frac{1}{16}$ of a gallon. What part of a gallon is 10 cups?

_____

3) How many months are there in $\frac{5}{6}$ of a year?

_____

4) A florist sells roses, violets, and tulips. If $\frac{7}{20}$ of the flowers in her store are roses and $\frac{8}{15}$ of the flowers are violets, what part of the total number of flowers in her store are tulips?

_____

5) Two–sevenths of the height of a sailboat's tallest mast is 8 feet. How many feet high is the sailboat's tallest mast?

_____

LIVEWORKSHEETS

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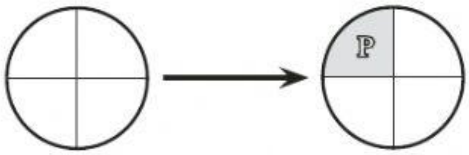
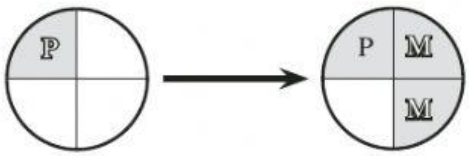
At times, drawing pictures can be very helpful when reasoning with fractions. The pictures can help to clarify what is happening.

EXAMPLE: Papa Bear ate $\frac{1}{4}$ of a pie. Mama Bear ate $\frac{2}{3}$ of what was left. What fractional part of the pie was left after Mama Bear finished?

Let's use the given circle to shade in and label the portion of the pie that Papa Bear ate ($\frac{1}{4}$).



There are now 3 equal parts (thirds) left that have not yet been eaten. Since Mama Bear ate $\frac{2}{3}$ of what was *left*, let's represent her portion by shading in and labeling 2 of the 3 remaining equal parts.



So, the remaining part after Mama Bear ate is $\frac{1}{4}$.

Try these: **Use the given pictures to help you solve.**

1) A fish tank was $\frac{3}{4}$ full. If $\frac{1}{3}$ of the water leaks out, how full will the tank be?

_____

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2) When it's a quarter of the way through the first half of a soccer match, what fractional part of the match is left?

_____

LIVEWORKSHEETS

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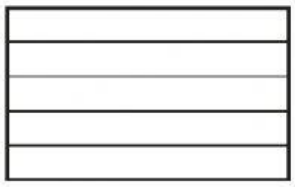
Use the given picture to help you find the answers.

A bowl was filled $\frac{4}{5}$ of the way up with dog food for Fido's dinner. Fido only ate $\frac{3}{4}$ of the dog food in the bowl and left the rest.



1) How full was the bowl after Fido finished eating his dinner?

_____

2) If there are 4 ounces of dog food left in the bowl after Fido finished his dinner, how many ounces of Fido's food does the bowl hold when it is full?

_____

Draw a picture to help you find the answers.

Jessica saved money to buy holiday gifts for her family. She started her holiday shopping by spending $\frac{2}{7}$ of the money on flowers for her mother. Then she spent $\frac{3}{5}$ of the remaining money on chocolates for her father. Jessica used the rest of the money to buy a bracelet for her sister.

3) What fractional part of the money did Jessica spend on her father's gift?

_____

4) If Jessica spent $12 on her sister's bracelet, how much money had she saved altogether to buy holiday gifts for her family?

_____

LIVEWORKSHEETS

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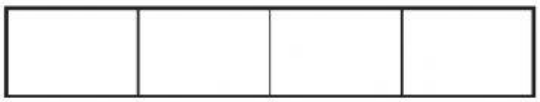
Use the given picture to help you find the answers.

Howard is playing in a high school basketball game that is halfway through the third quarter.



1) What fractional part of the game is left?

_____

2) If there are 12 minutes of playing time left in the game, how many minutes of playing time are there in the whole game?

_____

Draw a picture to help you find the answers.

When Andrew got in his car to drive home from work, he saw that his fuel gauge indicated that the tank was $\frac{1}{2}$ full. When he pulled into his driveway, the fuel gauge showed that he used $\frac{1}{3}$ of the fuel that was in the tank before he started his trip home.

3) How full was the tank when Andrew arrived home?

_____

4) If the fuel tank had 4 gallons of gasoline left when he got home, how many gallons of gasoline can the fuel tank hold?

_____

LIVEWORKSHEETS

• Problem Solving with Fractions •

In each exercise, draw pictures to help you find the answers.

Kira is cleaning the tiles inside her pool today. The pool was $\frac{4}{7}$ full of water at the start of the day. She decided to drain half of the water out of the pool before she started cleaning the tiles.

1) How full was the pool after Kira drained out half of the water?

_____

2) If there was 1,000 gallons of water left in the pool, how many gallons did Kira drain out of the pool?

_____

3) How many total gallons of water can the pool hold?

_____

Jackson is attending a lacrosse game that is halfway through the first quarter.

4) What fractional part of the game is left?

_____

5) If $7\frac{1}{2}$ minutes of playing time have past, how many total minutes of playing time are there in the game?

_____

6) How many minutes of playing time are left in the game?

_____