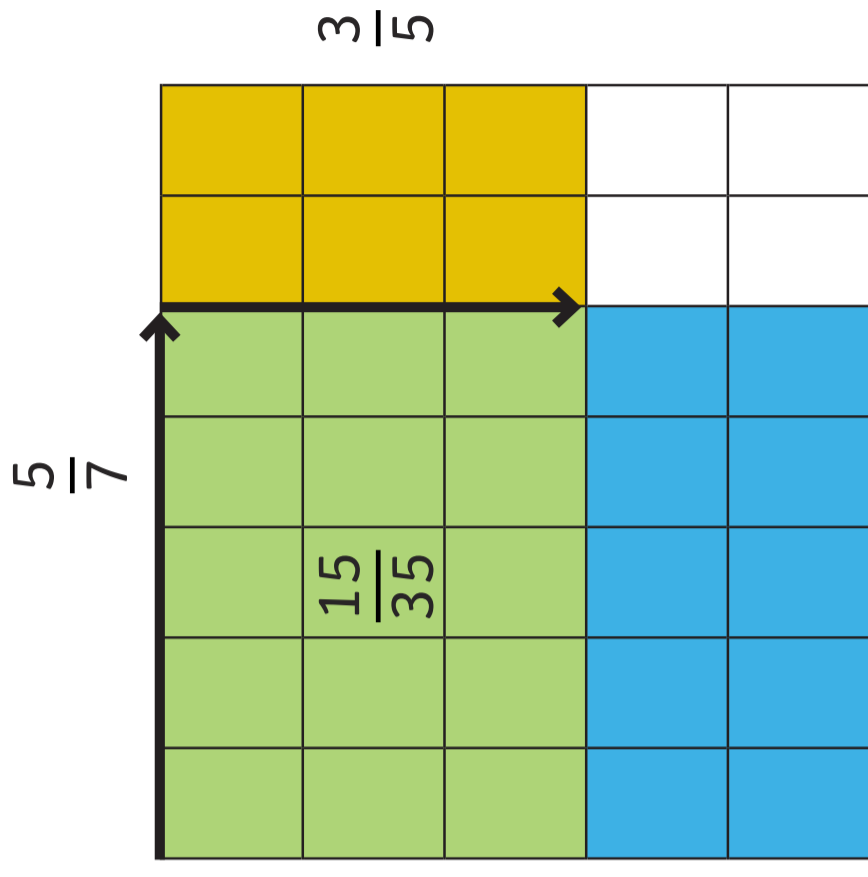# How to Multiply Fractions

Use a fraction multiplication bar model.

It is helpful to substitute the word 'of' for the multiplication sign.

Remember to simplify the answer if possible.

$$\frac{5}{7} \times \frac{3}{5} = \frac{15}{35} = \frac{3}{7}$$

$$\frac{3}{5}$$

$$\frac{5}{7}$$

$$\frac{15}{35}$$

Multiply the numerators together.

Multiply the denominators together.
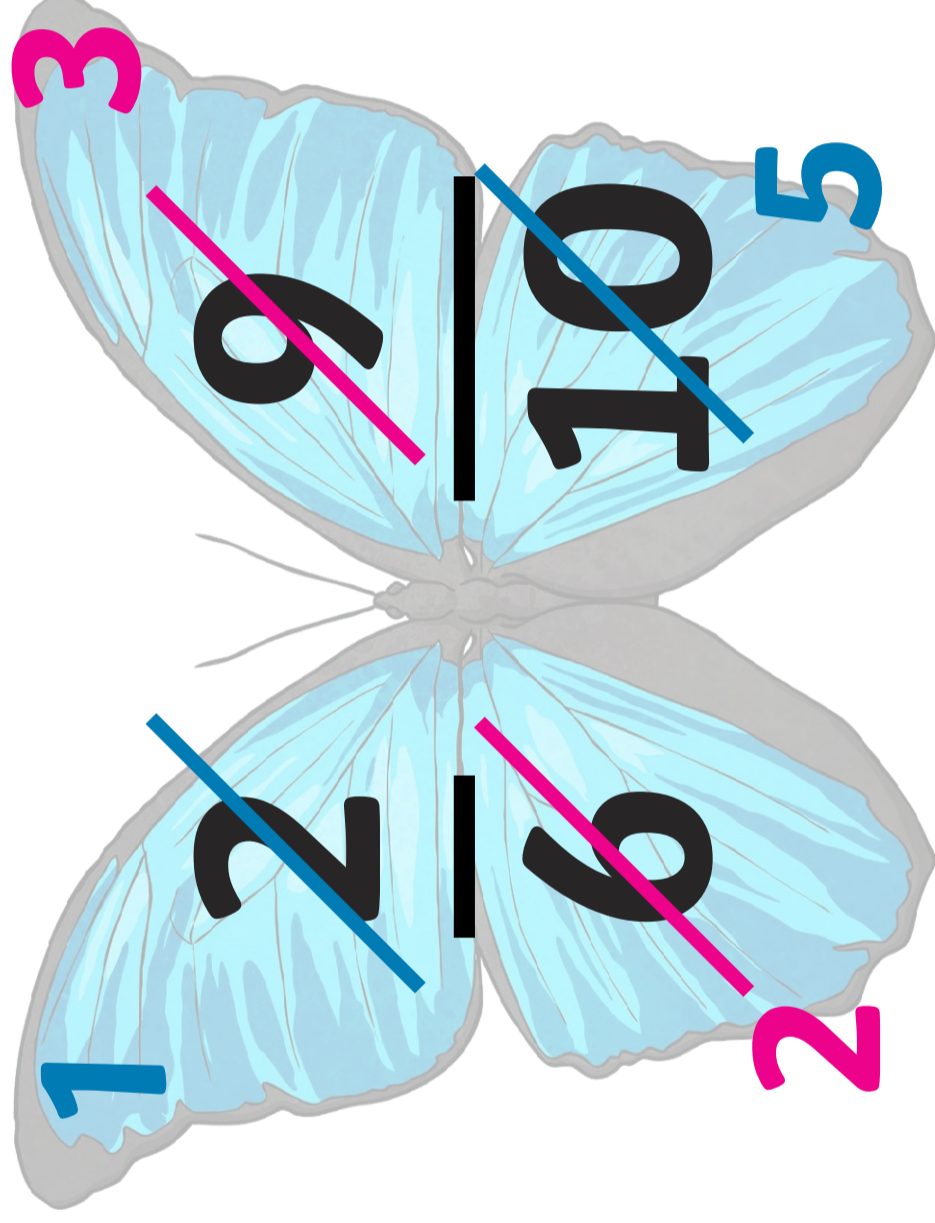
Simplify the answer if possible.

$$4 \times 3 = 12$$

$$\frac{4}{6} \times \frac{3}{8} = \frac{12}{48} = \frac{1}{4}$$

$$6 \times 8 = 48$$

Look at the diagonal numbers of the fractions and identify whether there are any common factors.

Simplify the diagonals if possible.

Then, multiply the numerators together and multiply the denominators together.

$$\frac{3}{9} \quad \frac{5}{10}$$

$$\frac{1}{2} \quad \frac{6}{2}$$

How to Multiply Fractions

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$$\frac{3}{5}$$

$$\frac{15}{35}$$

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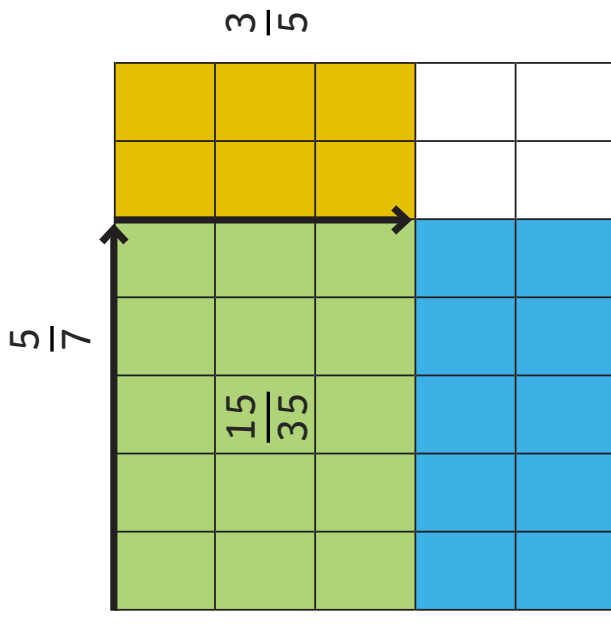Then, multiply the numerators together and multiply the denominators together.

$$\frac{9}{2} \times \frac{10}{6}$$

with diagonal numbers 3, 5, 1, 2

How to Multip

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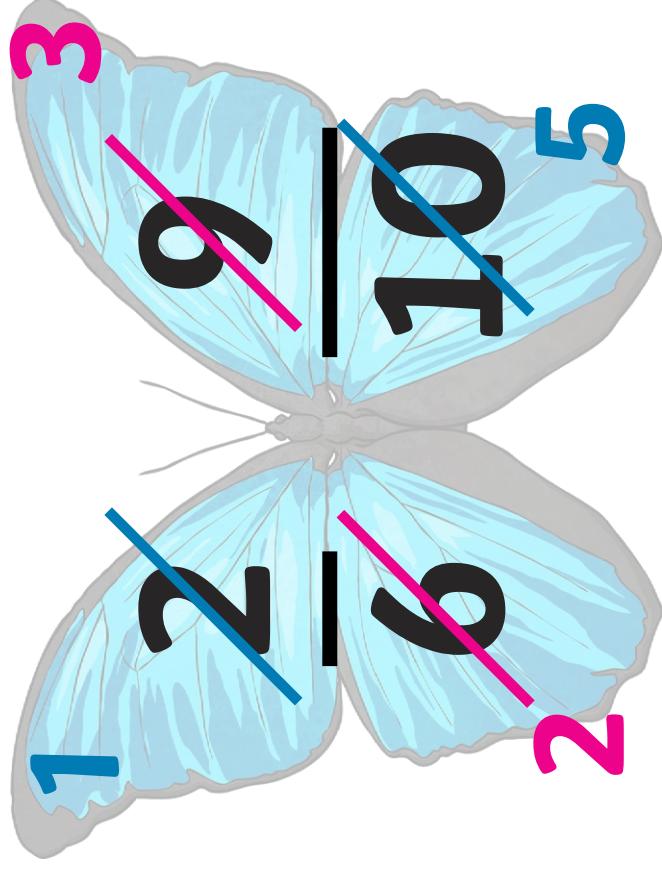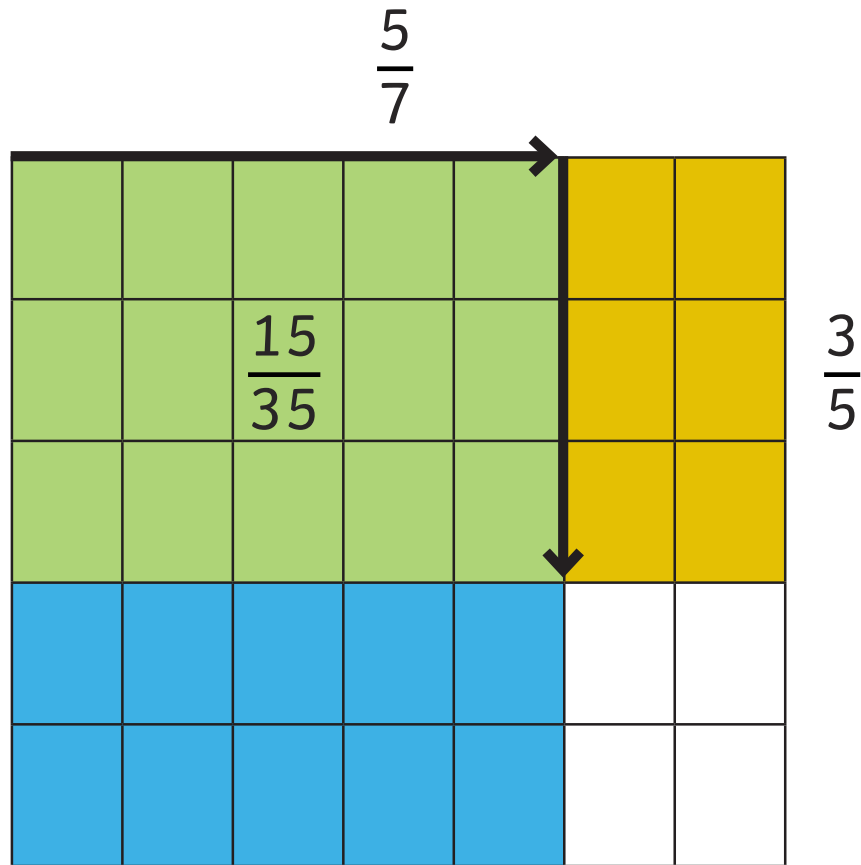
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iply Fractions

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Then, multiply the numerators together and mu[...]

$$\frac{1}{2} \quad \frac{2}{6}$$

...s and identify whether there are any

multiply the denominators together.

$$\frac{9}{10}$$ 3 5

How to Multiply Fractions

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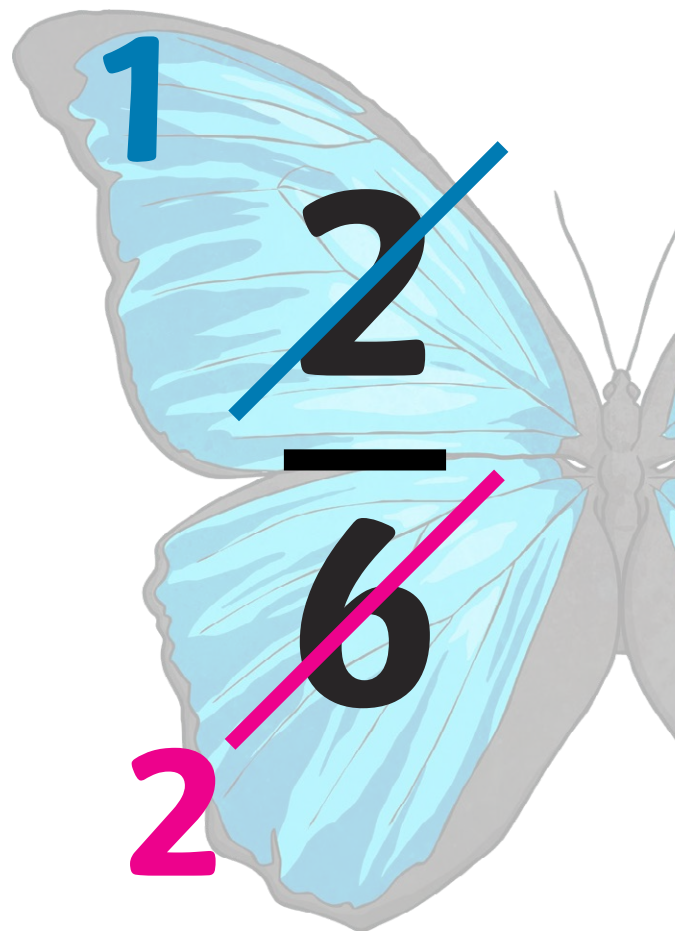
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REGENT STUDIES
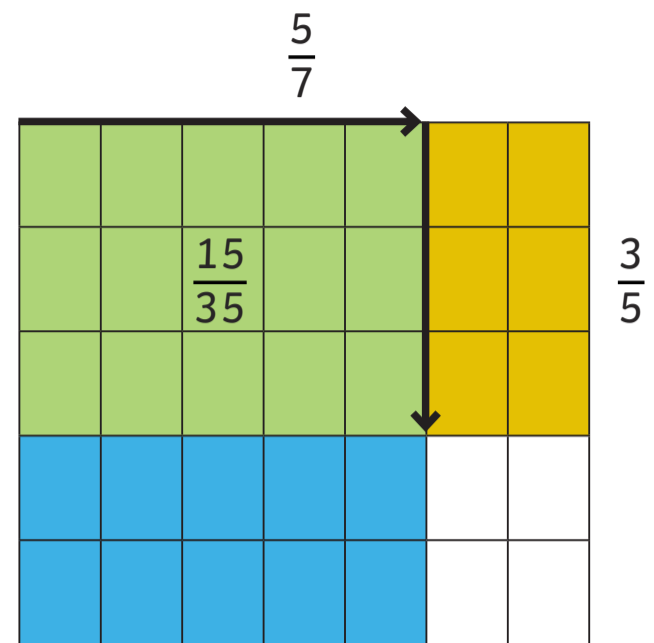Focused education on life's walk!
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How to Multiply Fractions

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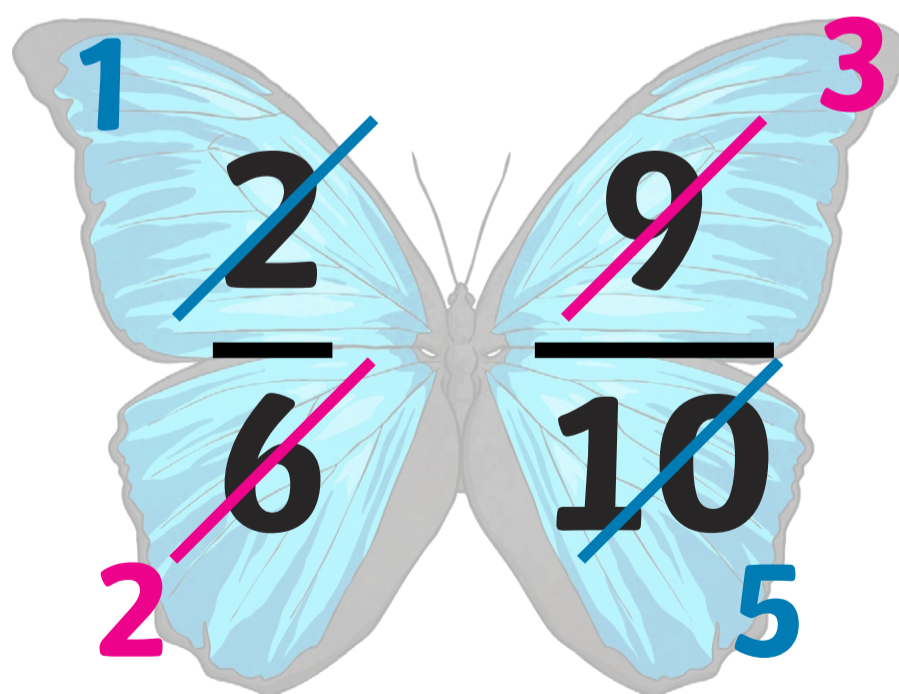$$\frac{4}{6} \times \frac{3}{8} = \frac{12}{48} = \frac{1}{4}$$

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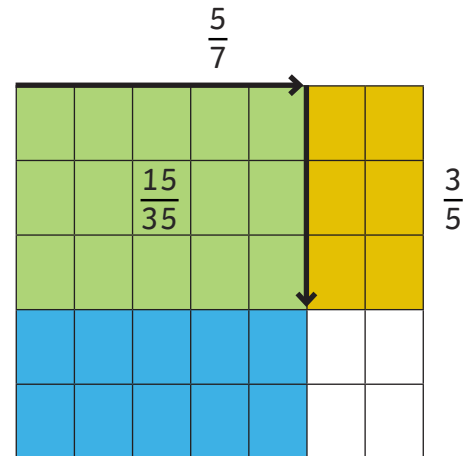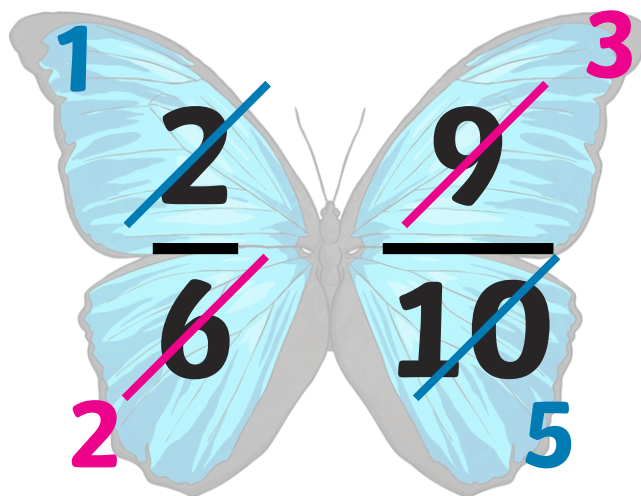Then, multiply the numerators together and multiply the denominators together.

$$\frac{2}{6} \qquad \frac{9}{10}$$

1   3
2   5

Multiplying Fractions Joke Codebreaker

I can multiply simple pairs of proper fractions, writing the answer in its simplest form.

To discover the answer to the joke, work out the answers to each of the calculations. Use the grid to locate the letter that matches each answer and write it in the square. The answer to the joke will read along the squares.

What do you call a cow on a trampoline?

$\frac{4}{10} \times \frac{2}{3}$ $\qquad$ $\frac{2}{7} \times \frac{3}{9}$ $\qquad$ $\frac{5}{8} \times \frac{3}{10}$ $\qquad$ $\frac{3}{4} \times \frac{5}{6}$

$\frac{7}{10} \times \frac{2}{6}$ $\qquad$ $\frac{2}{8} \times \frac{2}{3}$ $\qquad$ $\frac{3}{5} \times \frac{2}{6}$ $\qquad$ $\frac{6}{8} \times \frac{5}{6}$ $\qquad$ $\frac{4}{6} \times \frac{2}{4}$

Letter	a	e	h	i	k	l	m	s
Answer	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{2}{21}$	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{4}{15}$	$\frac{7}{30}$

Multiplying Fractions Joke Codebreaker
Answers

To discover the answer to the joke, work out the answers to each of the calculations. Use the grid to locate the letter that matches each answer and write it in the square. The answer to the joke will read along the squares.

> ### What do you call a cow on a trampoline?

m	i	l	k
$\frac{4}{10} \times \frac{2}{3}$	$\frac{2}{7} \times \frac{3}{9}$	$\frac{5}{8} \times \frac{3}{10}$	$\frac{3}{4} \times \frac{5}{6}$
$\frac{4}{15}$	$\frac{2}{21}$	$\frac{3}{16}$	$\frac{5}{8}$

s	h	a	k	e
$\frac{7}{10} \times \frac{2}{6}$	$\frac{2}{8} \times \frac{2}{3}$	$\frac{3}{5} \times \frac{2}{6}$	$\frac{6}{8} \times \frac{5}{6}$	$\frac{4}{6} \times \frac{2}{4}$
$\frac{7}{30}$	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{5}{8}$	$\frac{1}{3}$

Letter	a	e	h	i	k	l	m	s
Answer	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{2}{21}$	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{4}{15}$	$\frac{7}{30}$

Multiplying Fractions Word Problems

I can multiply simple pairs of proper fractions, writing the answer in its simplest form.

For each word problem, multiply the fractions together to find the answer. Show your working out.

1. A group of children play in an orchestra. $\frac{1}{4}$ of the children play a brass instrument. Of these children, $\frac{2}{3}$ play a trumpet. What fraction of the group of children play a trumpet?

2. Sammy has a bag of sweets. $\frac{2}{5}$ of the sweets are fizzy. Of these fizzy sweets, $\frac{3}{4}$ are orange. What fraction of the sweets are fizzy and orange?

3. At the local zoo, $\frac{5}{6}$ of the creatures have fur. Of these furry animals, $\frac{1}{3}$ are lions. What fraction of all the creatures are lions?

4. Aziz grows vegetables in his garden. $\frac{3}{7}$ of the vegetables grow underground. Of these underground vegetables, $\frac{2}{5}$ are potatoes. What fraction of all the vegetables are potatoes?

5. At the local Italian restaurant, $\frac{5}{8}$ of the meals are pasta dishes. Of these pasta dishes, $\frac{2}{5}$ use spaghetti. What fraction of all the dishes use spaghetti?

6. Sandra picked $\frac{7}{10}$ of a plant's strawberries. She made a pot of jam which used $\frac{2}{5}$ of the strawberries. What fraction of the plant's strawberries went into the pot of jam?

Multiplying Fractions Word Problems
Answers

For each word problem, multiply the fractions together to find the answer. Show your working out.

1. A group of children play in an orchestra. $\frac{1}{4}$ of the children play a brass instrument. Of these children, $\frac{2}{3}$ play a trumpet. What fraction of the group of children play a trumpet?

$$\frac{2}{3} \times \frac{1}{4} = \frac{2}{12} = \frac{1}{6}$$

2. Sammy has a bag of sweets. $\frac{2}{5}$ of the sweets are fizzy. Of these fizzy sweets, $\frac{3}{4}$ are orange. What fraction of the sweets are fizzy and orange?

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20} = \frac{3}{10}$$

3. At the local zoo, $\frac{5}{6}$ of the creatures have fur. Of these furry animals, $\frac{1}{3}$ are lions. What fraction of all the creatures are lions?

$$\frac{5}{6} \times \frac{1}{3} = \frac{5}{18}$$

4. Aziz grows vegetables in his garden. $\frac{3}{7}$ of the vegetables grow underground. Of these underground vegetables, $\frac{2}{5}$ are potatoes. What fraction of all the vegetables are potatoes?

$$\frac{3}{7} \times \frac{2}{5} = \frac{6}{35}$$

5. At the local Italian restaurant, $\frac{5}{8}$ of the meals are pasta dishes. Of these pasta dishes, $\frac{2}{5}$ use spaghetti. What fraction of all the dishes use spaghetti?

$$\frac{5}{8} \times \frac{2}{5} = \frac{10}{40} = \frac{1}{4}$$

6. Sandra picked $\frac{7}{10}$ of a plant's strawberries. She made a pot of jam which used $\frac{2}{5}$ of the strawberries. What fraction of the plant's strawberries went into the pot of jam?

$$\frac{2}{5} \times \frac{7}{10} = \frac{14}{50} = \frac{7}{25}$$

Multiplying Fractions Word Problems

I can multiply simple pairs of proper fractions, writing the answer in its simplest form.

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$$\frac{3}{4} \times \frac{2}{5} = \frac{6}{20} = \frac{3}{10}$$

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$$\frac{2}{5} \times \frac{4}{6} = \frac{8}{30} = \frac{4}{15}$$

3. At the local zoo, $\frac{5}{6}$ of the creatures have fur. Of these furry animals, $\frac{4}{9}$ are lions. What fraction of all the creatures are lions?

$$\frac{5}{6} \times \frac{4}{9} = \frac{20}{54} = \frac{10}{27}$$

4. Aziz grows vegetables in his garden. $\frac{4}{7}$ of the vegetables grow underground. Of these underground vegetables, $\frac{5}{8}$ are potatoes. What fraction of all the vegetables are potatoes?

$$\frac{4}{7} \times \frac{5}{8} = \frac{20}{56} = \frac{5}{14}$$

5. At the local Italian restaurant, $\frac{5}{8}$ of the meals are pasta dishes. Of these pasta dishes, $\frac{6}{7}$ use spaghetti. What fraction of all the dishes use spaghetti?

$$\frac{5}{8} \times \frac{6}{7} = \frac{30}{56} = \frac{15}{28}$$

6. Sandra picked $\frac{7}{10}$ of a plant's strawberries. She made a pot of jam which used $\frac{5}{9}$ of the strawberries. What fraction of the plant's strawberries went into the pot of jam?

$$\frac{7}{10} \times \frac{5}{9} = \frac{35}{90} = \frac{7}{18}$$

Multiplying Fractions Word Problems

I can multiply simple pairs of proper fractions, writing the answer in its simplest form.

For each word problem, multiply the fractions together to find the answer. Show your working out.

1. A group of children play in an orchestra. $\frac{3}{4}$ of the children play a brass instrument. Of these children, $\frac{2}{5}$ play a trumpet. What fraction of the group of children play a trumpet?

If there are 40 children altogether, how many play the trumpet?

2. Sammy has a bag of sweets. $\frac{2}{5}$ of the sweets are fizzy. Of these fizzy sweets, $\frac{4}{6}$ are orange. What fraction of the sweets are fizzy and orange?

If there are 60 sweets altogether, how many are fizzy and orange?

3. At the local zoo, $\frac{5}{6}$ of the creatures have fur. Of these furry animals, $\frac{4}{9}$ are lions. What fraction of all the creatures are lions?

If there are 135 creatures altogether, how many lions are there?

4. Aziz grows vegetables in his garden. $\frac{4}{7}$ of the vegetables grow underground. Of these underground vegetables, $\frac{5}{8}$ are potatoes. What fraction of all the vegetables are potatoes?

If there are 70 vegetables altogether, how many potatoes are there?

5. At the local Italian restaurant, $\frac{4}{8}$ of the meals are pasta dishes. Of these pasta dishes, $\frac{6}{7}$ use spaghetti. What fraction of all the dishes use spaghetti?

If there are 63 dishes altogether, how many use spaghetti?

6. Sandra picked $\frac{7}{10}$ of a plant's strawberries. She made a pot of jam which used $\frac{5}{9}$ of the strawberries. What fraction of the plant's strawberries went into the pot of jam?

If Sandra picked 108 strawberries, how many strawberries did she use to make one pot of jam?

Multiplying Fractions Word Problems
Answers

For each word problem, multiply the fractions together to find the answer. Show your working out.

---

1. A group of children play in an orchestra. $\frac{3}{4}$ of the children play a brass instrument. Of these children, $\frac{2}{5}$ play a trumpet. What fraction of the group of children play a trumpet?

$$\frac{3}{4} \times \frac{2}{5} = \frac{6}{20} = \frac{3}{10}$$

If there are 40 children altogether, how many play the trumpet? **12 children**

---

2. Sammy has a bag of sweets. $\frac{2}{5}$ of the sweets are fizzy. Of these fizzy sweets, $\frac{4}{6}$ are orange. What fraction of the sweets are fizzy and orange?

$$\frac{2}{5} \times \frac{4}{6} = \frac{8}{30} = \frac{4}{15}$$

If there are 60 sweets altogether, how many are fizzy and orange? **16 sweets**

---

3. At the local zoo, $\frac{5}{6}$ of the creatures have fur. Of these furry animals, $\frac{4}{9}$ are lions. What fraction of all the creatures are lions?

$$\frac{5}{6} \times \frac{4}{9} = \frac{20}{54} = \frac{10}{27}$$

If there are 135 creatures altogether, how many lions are there? **50 lions**

---

4. Aziz grows vegetables in his garden. $\frac{4}{7}$ of the vegetables grow underground. Of these underground vegetables, $\frac{5}{8}$ are potatoes. What fraction of all the vegetables are potatoes?

$$\frac{4}{7} \times \frac{5}{8} = \frac{20}{56} = \frac{5}{14}$$

If there are 70 vegetables altogether, how many potatoes are there? **25 potatoes**

---

5. At the local Italian restaurant, $\frac{4}{8}$ of the meals are pasta dishes. Of these pasta dishes, $\frac{6}{7}$ use spaghetti. What fraction of all the dishes use spaghetti?

$$\frac{4}{8} \times \frac{6}{7} = \frac{24}{56} = \frac{3}{7}$$

If there are 63 dishes altogether, how many use spaghetti? **27 dishes**

---

6. Sandra picked $\frac{7}{10}$ of a plant's strawberries. She made a pot of jam which used $\frac{5}{9}$ of the strawberries. What fraction of the plant's strawberries went into the pot of jam?

$$\frac{7}{10} \times \frac{5}{9} = \frac{35}{90} = \frac{7}{18}$$

If Sandra picked 108 strawberries, how many strawberries did she use to make one pot of jam? **42 strawberries**