



Pizza Kitchen

Name: _____

Date: _____

Class: _____

My level: ☐ Explorer ☐ Investigator ☐ Legend

Mission: Orders are piling up at Sunnyside Pizza! Customers want leftover slices from different pizzas combined into one box. You can't add slices of different sizes, so re-cut the pizzas until every slice is the same size.

Big question: How can we add and subtract fractions with different denominators?

★ Warm-up: Which one doesn't belong?

Circle the fraction that does NOT belong. Explain.

$1/2$ • $2/4$ • $3/6$ • $3/5$

$2/3$ • $4/6$ • $6/9$ • $3/4$

Key vocabulary

Denominator	How many equal pieces the whole is cut into.
Numerator	How many of those pieces you have.
Common denominator	A denominator both fractions can be rewritten with.
Equivalent fractions	Fractions that name the same amount, like $1/2$ and $3/6$.

1 Box 1

Estimate first

PREDICTION Before cutting: is $1/2 + 1/3$ more or less than one whole pizza?

☐ Less than 1 ☐ Exactly 1 ☐ More than 1

Find a common cut

In the simulator: Re-cut both pizzas into equal slices that work for halves AND thirds, then box it.

How much pizza is in the box? (Type a fraction like $5/6$.)

Answer: _____

2 Box 2

Other cuts?

Which slice counts would ALSO work for halves and thirds? Choose all.

Choose all that apply.

☐ 6 ☐ 12 ☐ 18 ☐ 4 ☐ 9

3 Box 3

Order #2

In the simulator: Box order #2: $2/3 + 1/4$.

How much pizza is in the box? (Use a mixed number like $1 \frac{1}{2}$ if it is more than 1.)

Answer: _____

Show your thinking:

4 Box 4

Order #3: take away

In the simulator: Solve order #3: $3/4 - 1/6$.

How much pizza is left?

Answer: _____

Show your thinking:

5 Box 5

Error detective

How do you know Marco is wrong WITHOUT calculating exactly?

- ☐ $3/4$ is already more than $1/2$, and $8/12 = 2/3$ is less than $3/4 +$ a bit. The answer must be more than 1
- ☐ $8/12$ is bigger than both fractions, so it is right ☐ You can never check without calculating

Order #4

In the simulator: Box order #4: $3/4 + 5/8$.

What is $3/4 + 5/8$? Use a mixed number.

Answer: _____

Show your thinking:

6 Box 6

Legend: smallest cut Legend only

What is the SMALLEST number of slices that works for fourths and sixths?

Answer: _____ slices

7 Box 7

Teach a new cook

Explain to a new cook how to add $1/2$ and $1/3$ of a pizza. Use the words "same size".



Exit ticket: answer the big question in your own words

How can we add and subtract fractions with different denominators?

Completion code:

Shown on the last screen of the simulator.