

Refine Adding and Subtracting Mixed Numbers

Complete the Example below. Then solve problems 1–9.

EXAMPLE

A soccer team drinks $5\frac{2}{3}$ liters of water during a game. Their opponents drink $4\frac{2}{3}$ liters of water. How much water do both teams drink?

Look at how you could show your work using pictures.



Solution

The student added the whole numbers and then combined the fractions!



PAIR/SHARE

How could you use a number line to help you solve this problem?

APPLY IT

- 1 Kelly buys $4\frac{7}{8}$ pounds of apples and $2\frac{3}{8}$ pounds of oranges. How many pounds of fruit does she buy altogether? Show your work.

Solution

What operation do you need to use?

PAIR/SHARE

Is there one way that works the best to solve this problem?

- 2 Kari reads a total of $20\frac{2}{4}$ pages in her science and social studies books combined. She reads $12\frac{3}{4}$ pages in her science book. How many pages does she read in her social studies book? Show your work.

Solution

- 3 Which of the following shows a correct way to find $15\frac{4}{5} - 9\frac{3}{5}$?
- A Subtract the whole numbers and then subtract the fractions. Subtract the differences.
 - B Add the whole numbers and then add the fractions. Subtract the sums.
 - C Subtract the whole numbers and then subtract the fractions. Add the differences.
 - D Write the mixed numbers as fractions greater than one. Then add the fractions.

Marella chose A as the correct answer. Did she do each step correctly? Explain.

Sometimes counting up or back can help you solve problems like this.



PAIR/SHARE

How can you tell if your answer is reasonable?

Solve the problem on your own and then check for your answer!

PAIR/SHARE

Draw a model to check your answer.

- 4 Ella orders 16 pizzas for a party. There are $3\frac{5}{8}$ pizzas left after the party. How many pizzas are eaten?
- (A) $12\frac{3}{8}$
(B) $13\frac{3}{8}$
(C) $13\frac{5}{8}$
(D) $19\frac{5}{8}$
- 5 Shawn works in his yard for $3\frac{5}{6}$ hours on Saturday. He works another $4\frac{1}{6}$ hours in his yard on Sunday. How many hours does he work in the yard in all?
- (A) $\frac{2}{6}$ of an hour
(B) 7 hours
(C) $7\frac{5}{6}$ hours
(D) 8 hours
- 6 Four friends share 3 orders of chicken wings.
- Alex eats $\frac{5}{8}$ of an order.
 - Chase eats $\frac{7}{8}$ of an order.
 - Ella eats $\frac{6}{8}$ of an order.



How much of an order of chicken wings is left for the fourth friend?

Solution

- 7 Marnel uses $4\frac{2}{3}$ cups of cereal and $3\frac{1}{3}$ cups of marshmallows to make cereal bars. How many more cups of cereal does Marnel use than marshmallows? Show your work.



Solution

- 8 Kieran runs the first part of a relay in $4\frac{4}{6}$ minutes. David runs the next part in $3\frac{5}{6}$ minutes. How long do they take to run both parts of the relay? Show your work.

Solution

9 MATH JOURNAL

Show two ways to add $2\frac{3}{8} + 3\frac{4}{8}$.



SELF CHECK Go back to the Unit 4 Opener and see what you can check off.