LESSON MAKER PRO

Fraction Switch

Make like denominators to add and subtract fractions.

GRADE 5 · 5.NOS.C.8.c

5.NOS.C.8.c "Use equivalent fractions to produce an equivalent sum or difference of fractions with like denominators (e.g. 2/3 + 5/4 = 8/12 + 15/12 = 23/12. In general, a/b + c/d = (ad + bc)/bd)."

NAME _____ DATE _____

MAKE THE PARTS MATCH

To add or subtract fractions with different denominators, rewrite them as equivalent fractions with a common denominator. Then add or subtract the numerators and keep the denominator. Simplify your answer if you can.

WORKED EXAMPLE

Find $3/7 + 2/5$.

1. $3/7 = 15/35$
2. $2/5 = 14/35$
3. $15/35 + 14/35 = 29/35$

Answer: 29/35

PRACTICE 6 problems

1 Rewrite with like denominators, then find 1/2 + 1/3.

ANSWER _____

2 Rewrite with like denominators, then find 3/4 - 1/6.

ANSWER _____

3 Rewrite with like denominators, then find 5/8 + 1/4.

ANSWER _____

4 Rewrite with like denominators, then find 7/10 - 1/5.

ANSWER _____

5 Rewrite with like denominators, then find 2/3 + 3/8.

ANSWER _____

6 Rewrite with like denominators, then find 5/6 - 3/4.

ANSWER _____

APPLY IT Show your work

1 Maya played a game for 3/4 hour on Saturday and 2/3 hour on Sunday. How many hours did she play in all? Show equivalent fractions with like denominators.

WORK SPACE

ANSWER _____

2 A playlist lasts 5/6 hour. You have listened for 3/8 hour. How much time is left? Show equivalent fractions with like denominators.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student says 4/9 + 1/2 = 5/11 because they added the numerators and the denominators. Explain why this does not work. Rewrite the fractions with like denominators and find the correct sum.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Switch

GRADE 5 · 5.NOS.C.8.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Rewrite with like denominators, then find 1/2 + 1/3.	**5/6**
2	Rewrite with like denominators, then find 3/4 - 1/6.	**7/12**
3	Rewrite with like denominators, then find 5/8 + 1/4.	**7/8**
4	Rewrite with like denominators, then find 7/10 - 1/5.	**1/2**
5	Rewrite with like denominators, then find 2/3 + 3/8.	**25/24**
6	Rewrite with like denominators, then find 5/6 - 3/4.	**1/12**

PART 2 · APPLY IT

1. **17/12 hours** Rewrite the times as 9/12 and 8/12 hour. Add to get 17/12 hours, or 1 5/12 hours.
2. **11/24 hour** Rewrite 5/6 as 20/24 and 3/8 as 9/24. Subtract to get 11/24 hour.

CHALLENGE

The fractions have parts of different sizes, so their numerators cannot be added until the denominators match. 4/9 + 1/2 = 8/18 + 9/18 = 17/18.

Accept equivalent forms, including 1 1/24 for problem 5 and 1 5/12 hours for the first word problem. Students should show equivalent fractions with like denominators before combining numerators.