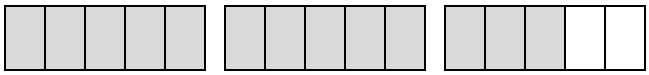
Make and Trade Fractions

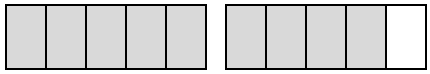
Add and subtract mixed numbers with like denominators

Name: _____ Date: _____

Part 1: Build an Addition

Listen while your teacher reads the first direction. Use fraction bars to model the two mixed numbers below. Circle a group of 5 fifths that can be traded for 1 whole. Then solve.

2 3/5 

\+ 1 4/5 

_____

2 3/5 + 1 4/5 =

Answer: _____

How many fifths made a new whole? Explain with numbers or words.

Make and Trade Fractions

Add and subtract mixed numbers with like denominators

Name: _____ Date: _____

Part 2: Regroup and Solve

Solve each problem. Show a trade to a new whole when you add more than one whole of fractional pieces. Show a borrowed whole changed into fractional pieces when you subtract.

1. 3 5/7 + 2 6/7 = _____

2. 4 7/9 + 1 5/9 = _____

3. 5 1/6 - 2 5/6 = _____

4. 7 2/8 - 3 6/8 = _____

Choose problem 3 or 4. Explain how you regrouped one whole.

Make and Trade Fractions

Add and subtract mixed numbers with like denominators

Answer Key and Teaching Notes

Materials and setup: Print and supply all student pages, keeping teacher-key pages separate. Supply fifths fraction bars or fraction strips for Part 1, pencils, and scratch paper. The printed model is a reference; students should physically move bars if available. The worksheet supplies the visual model and work spaces. No additional materials are needed.

Teaching script: Say: “Listen for the denominator. Both addends use fifths, so fifth fifths can be traded for one whole. Build each mixed number, put the fractional pieces together, and trade whenever you have five fifths.” For subtraction say: “If there are not enough fractional pieces to subtract, rename one whole as pieces with the same denominator. Keep the value the same.” Do not read answers aloud before students work.

Observe: During Part 1, look for students combining 3 fifths and 4 fifths, trading 5 fifths for 1 whole, and leaving 2 fifths. During Part 2, look for a correct rename such as 5 1/6 = 4 7/6. Ask: “What did one whole become?” Record whether the student preserves the denominator and completes the arithmetic. Accept equivalent fractional forms unless a simplified form is requested.

Answers:
Part 1: 2 3/5 + 1 4/5 = 4 2/5. The 7 fifths include 5 fifths, which trade for 1 whole, leaving 2 fifths.
1. 3 5/7 + 2 6/7 = 5 + 11/7 = 6 4/7.
2. 4 7/9 + 1 5/9 = 5 + 12/9 = 6 3/9 = 6 1/3. Accept 6 3/9.
3. 5 1/6 - 2 5/6 = 4 7/6 - 2 5/6 = 2 2/6 = 2 1/3. Accept 2 2/6.
4. 7 2/8 - 3 6/8 = 6 10/8 - 3 6/8 = 3 4/8 = 3 1/2. Accept 3 4/8.

Explanation rubric: A complete response identifies the borrowed whole and correctly renames it in equal fractional pieces, for example: “I changed 5 1/6 into 4 7/6 because one whole is 6/6.”

Source credit: New York Next Generation Mathematics Learning Standards, NY-4.NF.3.c, “Add and subtract mixed numbers with like denominators.” https://www.nysed.gov/curriculum-instruction/new-york-state-next-generation-mathematics-learning-standards