

Luna's Space Adventure

Name _____

Grade 4 • Adding fractions • 4.NF.B.3

Date _____



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Same-size pieces Add or subtract the numerators. The denominator stays.

$$\frac{2}{10} + \frac{5}{10} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{8}{10} + \frac{8}{10} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{8}{12} + \frac{9}{12} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{4}{12} - \frac{2}{12} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{1}{2} + \frac{1}{2} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{2}{5} + \frac{1}{5} = \frac{\boxed{}}{\boxed{}}$$

Mixed numbers Add the wholes, add the fractions, then tidy up.

$$1 \frac{3}{6} + 1 \frac{5}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$1 \frac{2}{6} + 2 \frac{3}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$4 \frac{4}{8} + 1 \frac{4}{8} = \boxed{}$$

$$2 \frac{2}{3} + 2 \frac{2}{3} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

Story time

Zed painted $\frac{3}{6}$ of a fence and Nova painted $\frac{2}{6}$. How much of the fence is painted? _____

Nova painted $\frac{5}{8}$ of a fence and Zed painted $\frac{2}{8}$. How much of the fence is painted? _____

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ANSWER KEY



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Same-size pieces Add or subtract the numerators. The denominator stays.

$$\frac{2}{10} + \frac{5}{10} = \frac{7}{10}$$

$$\frac{8}{10} + \frac{8}{10} = \frac{16}{10}$$

$$\frac{8}{12} + \frac{9}{12} = \frac{17}{12}$$

$$\frac{4}{12} - \frac{2}{12} = \frac{2}{12}$$

$$\frac{1}{2} + \frac{1}{2} = \frac{2}{2}$$

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

Mixed numbers Add the wholes, add the fractions, then tidy up.

$$1 \frac{3}{6} + 1 \frac{5}{6} = 2 \frac{8}{6} = 3 \frac{2}{6}$$

$$1 \frac{2}{6} + 2 \frac{3}{6} = 3 \frac{5}{6}$$

$$4 \frac{4}{8} + 1 \frac{4}{8} = 5 \frac{8}{8} = 6$$

$$2 \frac{2}{3} + 2 \frac{2}{3} = 4 \frac{4}{3} = 5 \frac{1}{3}$$

Story time

Zed painted $\frac{3}{6}$ of a fence and Nova painted $\frac{2}{6}$. How much of the fence is painted?

$\frac{5}{6}$

Nova painted $\frac{5}{8}$ of a fence and Zed painted $\frac{2}{8}$. How much of the fence is painted?

$\frac{7}{8}$

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GUIDE

① What this sheet practises

Adding and subtracting fractions and mixed numbers with the same denominator, including story problems.

② A problem from the sheet, worked out

Same-size pieces Add or subtract the numerators. The denominator stays.

$$\frac{2}{10} + \frac{5}{10} = \frac{7}{10}$$

$$\frac{8}{10} + \frac{8}{10} = \frac{16}{10}$$

$$\frac{8}{12} + \frac{9}{12} = \frac{17}{12}$$

$$\frac{4}{12} - \frac{2}{12} = \frac{2}{12}$$

$$\frac{1}{2} + \frac{1}{2} = \frac{2}{2}$$

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

How: With same-size pieces, add or subtract the number of pieces: $1/5 + 3/5 = 4/5$, and the bottom stays. For mixed numbers, add the wholes and the fractions, then turn $3/3$ into 1.

③ Words to know

numerator the top number: how many parts

denominator the bottom number: the size of the parts

mixed number a whole number and a fraction: $2\frac{1}{3}$

like denominators the same bottom number

④ Watch for

- Adding the bottoms too: $1/3 + 1/3 = 2/6$.
- Leaving a mixed number like $6\frac{3}{3}$ instead of making it 7.
- Subtracting mixed numbers without trading a whole when the fraction is too small.

⑤ Where it fits

BEFORE

3.NF.A.1

Understand a unit fraction as one of the equal parts of a whole.

THIS SHEET

4.NF.B.3

Add and subtract fractions and mixed numbers with like denominators.

NEXT

5.NF.A.1

Add and subtract fractions with unlike denominators.

⑥ Helping at home

Use a measuring cup: pour $1/4$ cup of water, then $2/4$ cup more, and check that it reaches $3/4$.