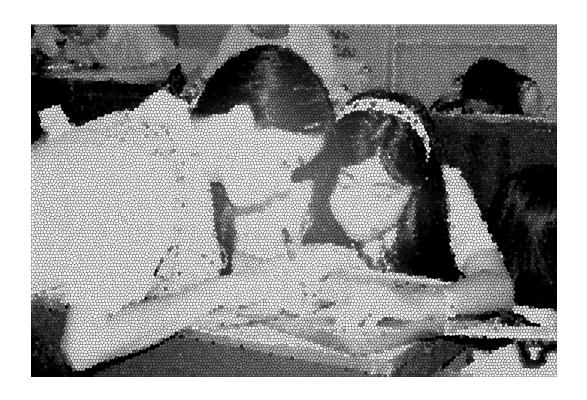
M A T H E M A T C S

5

Modified In-School Off-School Approach Modules (MISOSA)

Distance Education for Elementary Schools SELF-INSTRUCTIONAL MATERIALS



ADDITION OF TWO TO FOUR SIMILAR FRACTIONS



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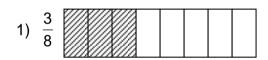


ADDITION OF TWO TO FOUR SIMILAR FRACTIONS

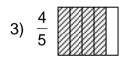
Objective: Add two to four similar fractions



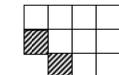
Give an estimate for the given fractions using the models. Write about 0, about $\frac{1}{2}$, or about 1.

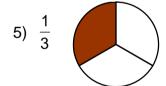














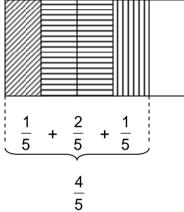




Nora painted $\frac{1}{5}$ of a large rectangle blue, $\frac{2}{5}$ yellow and $\frac{1}{5}$ green. What part of the rectangle did she end up painting?

What are the fractions mentioned in the problem? $(\frac{1}{5}, \frac{2}{5} \text{ and } \frac{1}{5})$ Are these fractions similar or dissimilar? (*They are similar fractions.*)

Let's picture the problem.



Nora painted $\frac{4}{5}$ of the large rectangle.

Here's another way of solving the problem.

Let's add
$$\frac{1}{5}$$
, $\frac{2}{5}$ and $\frac{1}{5}$.

Here's how:

Add the numerators.

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

Use the same denominator. Reduce the answer to its lowest terms if needed.

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





Did you find it easy? Well, here are other examples for you to study.

a.
$$\frac{4}{9} + \frac{2}{9} + \frac{1}{9} = \frac{4+2+1}{9} = \frac{7}{9}$$

b.
$$\frac{2}{11} + \frac{5}{11} + \frac{3}{11} = \frac{2+5+3}{11} = \frac{10}{11}$$

c.
$$\frac{1}{18} + \frac{5}{18} + \frac{2}{18} + \frac{4}{18} = \frac{1+5+2+4}{18} = \frac{12}{18}$$
 or $\frac{2}{3}$

Remember, express your answer in the lowest terms if possible.



Try These

A. Add. Choose the letter of the correct answer.

1)
$$\frac{1}{12} + \frac{3}{12} + \frac{2}{12} + \frac{1}{12}$$

a)
$$\frac{6}{12}$$

b)
$$\frac{7}{12}$$

c)
$$\frac{8}{12}$$

2)
$$\frac{2}{6} + \frac{3}{6}$$

a)
$$\frac{5}{6}$$

b)
$$\frac{4}{6}$$

c)
$$\frac{3}{6}$$

3)
$$\frac{2}{9} + \frac{4}{9} + \frac{1}{9}$$

a)
$$\frac{5}{9}$$

b)
$$\frac{6}{9}$$

c)
$$\frac{7}{9}$$

4)
$$\frac{2}{17} + \frac{5}{17} + \frac{8}{17}$$

a)
$$\frac{5}{6}$$
 b) $\frac{4}{6}$ c) $\frac{3}{6}$
a) $\frac{5}{9}$ b) $\frac{6}{9}$ c) $\frac{7}{9}$
a) $\frac{14}{17}$ b) $\frac{15}{17}$ c) $\frac{16}{17}$

b)
$$\frac{15}{17}$$

c)
$$\frac{16}{17}$$

$$5) \ \frac{2}{21} + \frac{7}{21} + \frac{2}{21} + \frac{1}{21}$$

a)
$$\frac{4}{7}$$

b)
$$\frac{13}{21}$$

c)
$$\frac{14}{21}$$

B. Read and solve.

- 1. What is the sum of $\frac{1}{6}$, $\frac{2}{6}$ and $\frac{2}{6}$?
- 2. What is $\frac{1}{4}$ more than $\frac{2}{4}$?
- 3. $\frac{1}{16}$ when added to $\frac{6}{16}$ is ____.





Wrap Up

In adding similar fractions, just add the numerators and use the same denominator.



On Your Own

A. Find the sum.

1)
$$\frac{1}{5} + \frac{2}{5}$$

3)
$$\frac{1}{15} + \frac{2}{15} + \frac{3}{15}$$

5)
$$\frac{2}{19} + \frac{7}{19} + \frac{9}{19}$$

2)
$$\frac{15}{100} + \frac{6}{100} + \frac{10}{100}$$

4)
$$\frac{2}{20} + \frac{2}{20} + \frac{1}{20} + \frac{8}{20}$$

B. Read and solve.

- 1) $\frac{1}{8}$ more than $\frac{4}{8}$ is _____.
- 2) What is the total of $\frac{1}{9}$, $\frac{2}{9}$ and $\frac{4}{9}$?
- 3) $\frac{4}{17}$ plus $\frac{2}{17}$ equals _____.
- 4) $\frac{2}{7}$ when added to $\frac{3}{7}$ and $\frac{1}{7}$ is _____.
- 5) What is the sum of $\frac{1}{11}$, $\frac{3}{11}$ and $\frac{5}{11}$?





Key to Correction ADDITION OF TWO TO FOUR SIMILAR FRACTIONS

REVIEW

- $\frac{1}{2}$
- 2) 0 3) 1 4) 0

- 5) $\frac{1}{2}$

TRY THESE

- A.
- 1) b
- 2) a
- 3) c
- 4) b 5) a

- B.
- 1)
- 2)
- $\frac{5}{6}$ $\frac{3}{4}$ $\frac{7}{16}$

ON YOUR OWN

- A.
- 1)
- 31 2) 100
- $\frac{6}{15} = \frac{2}{5}$
- $\frac{13}{20}$

- В.
- $\frac{5}{8}$ $\frac{7}{9}$ 1)
- 2)
- 3)

