## 5.NF.A.1 Determining Like and Unlike Fractions

5.NF.A.1: Add and subtract fractions with unlike denominators.

1. Write a like fraction for each.

a. 
$$\frac{1}{8}$$

b. 
$$\frac{8}{14}$$

c. 
$$\frac{13}{17}$$

d. 
$$\frac{11}{32}$$

e. 
$$\frac{7}{22}$$

f. 
$$\frac{2}{3}$$

g. 
$$\frac{5}{13}$$

h. 
$$\frac{9}{23}$$

Answers:

a.

b.

c.

d.

e.

f.

g.

h.

2. Which fraction is not a like fraction to the other two?

a. 
$$\frac{2}{11}, \frac{7}{13}, \frac{9}{11}$$

d. 
$$\frac{1}{50}$$
,  $\frac{3}{50}$ ,  $\frac{1}{100}$ 

b. 
$$\frac{11}{32}$$
,  $\frac{6}{16}$ ,  $\frac{15}{16}$ 

e. 
$$\frac{2}{5}, \frac{5}{6}, \frac{2}{6}$$

c. 
$$\frac{8}{13}$$
,  $\frac{3}{17}$ ,  $\frac{12}{17}$ 

f. 
$$\frac{11}{12}, \frac{5}{12}, \frac{3}{15}$$

Answers:

a.

d.

b.

e.

c.

f.

3. Explain how you can convert  $\frac{1}{3}$  and  $\frac{1}{4}$  to like fractions that are equivalent to their original value. Does it help in subtracting  $\frac{1}{4}$  from  $\frac{1}{3}$ ? How? What is the value of  $\frac{1}{3} - \frac{1}{4}$ ?

4. What is least common denominator? What is the least common denominator of  $\frac{1}{5}$  and  $\frac{1}{6}$ ? How does finding the least common denominator help in finding the sum or the difference of two, unlike fractions? Find the difference between the two fractions mentioned above.

Answer:

5. Which pair of fractions are unlike fractions?

A.  $\frac{1}{8}$ ,  $\frac{2}{16}$  B.  $\frac{3}{5}$ ,  $\frac{1}{5}$  C.  $\frac{5}{11}$ ,  $\frac{9}{11}$  D.  $\frac{11}{23}$ ,  $\frac{12}{23}$ 

Answer:

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**Answer Key** 

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f. 
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g. 
$$\frac{5}{13}$$

h. 
$$\frac{9}{23}$$

Answers:

a. 
$$\frac{3}{8}$$

b. 
$$\frac{6}{14}$$

c. 
$$\frac{8}{17}$$

d. 
$$\frac{9}{32}$$

e. 
$$\frac{11}{22}$$

f. 
$$\frac{1}{3}$$

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$$\frac{8}{13}$$

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$$\frac{15}{23}$$

2. Which fraction is not a like fraction to the other two?

a. 
$$\frac{2}{11}$$
,  $\frac{7}{13}$ ,  $\frac{9}{11}$ 

d. 
$$\frac{1}{50}$$
,  $\frac{3}{50}$ ,  $\frac{1}{100}$ 

b. 
$$\frac{11}{32}$$
,  $\frac{6}{16}$ ,  $\frac{15}{16}$ 

e. 
$$\frac{2}{5}, \frac{5}{6}, \frac{2}{6}$$

c. 
$$\frac{8}{13}$$
,  $\frac{3}{17}$ ,  $\frac{12}{17}$ 

f. 
$$\frac{11}{12}, \frac{5}{12}, \frac{3}{15}$$

Answers:

a. 
$$\frac{7}{13}$$

d. 
$$\frac{1}{100}$$

b. 
$$\frac{11}{32}$$

e. 
$$\frac{2}{5}$$

c. 
$$\frac{8}{13}$$

f. 
$$\frac{3}{15}$$

3. Explain how you can convert  $\frac{1}{3}$  and  $\frac{1}{4}$  to like fractions that are equivalent to their original value. Does it help in subtracting  $\frac{1}{4}$  from  $\frac{1}{3}$ ? How? What is the value of  $\frac{1}{3} - \frac{1}{4}$ ?

Answer:

Get the LCD of the two fractions which in this case is 12, then convert each fraction into equivalent fraction where 12 is the denominator.

$$\frac{1}{3} - \frac{1}{4} = \frac{4}{12} - \frac{3}{12} = \frac{1}{12}$$

4. What is least common denominator? What is the least common denominator of  $\frac{1}{5}$  and  $\frac{1}{6}$ ? How does finding the least common denominator help in finding the sum or the difference of two, unlike fractions? Find the difference between the two fractions mentioned above.

Answer:

LCD (least/lowest common denominator) is the least common multiple of the denominators of two or more fractions. The LCD of  $\frac{1}{5}$  and  $\frac{1}{6}$  is 30. It helps in converting unlike fractions to like fractions which makes it easier to add or subtract fractions. The difference is  $\frac{1}{30}$ .

5. Which pair of fractions are unlike fractions?

A. 
$$\frac{1}{8}$$
,  $\frac{2}{16}$ 

B. 
$$\frac{3}{5}$$
,  $\frac{1}{5}$ 

A. 
$$\frac{1}{8}$$
,  $\frac{2}{16}$  B.  $\frac{3}{5}$ ,  $\frac{1}{5}$  C.  $\frac{5}{11}$ ,  $\frac{9}{11}$  D.  $\frac{11}{23}$ ,  $\frac{12}{23}$  A.  $\frac{1}{8}$ ,  $\frac{2}{16}$ 

D. 
$$\frac{11}{23}$$
,  $\frac{12}{23}$ 

Answer: