

Unit 5 Practice Test

Name: Kelly

For each problem, find a common denominator and write which strategy you used. Then write the fractions using a common denominator and solve.

1 $\frac{2}{3}$ and $\frac{10}{15}$

a. Strategy: 15 is a multiple of 3

b. Fractions with a common denominator: $\frac{10}{15}$ and $\frac{10}{15}$

c. $\frac{2}{3} + \frac{10}{15} = \frac{20}{15} + \frac{10}{15}$ d. Fill in the blank with $<$, $>$, or $=$: $\frac{2}{3} = \frac{10}{15}$

2 $\frac{1}{4}$ and $\frac{2}{3}$

a. Strategy: common denom by multiplying

b. Fractions with a common denominator: $\frac{3}{12}$ and $\frac{8}{12}$

c. $\frac{1}{4} - \frac{2}{3} = \frac{3}{12} - \frac{16}{12}$ d. Fill in the blank with $<$, $>$, or $=$: $\frac{1}{4} > \frac{2}{3}$

3 $\frac{5}{6}$ and $\frac{3}{4}$

a. Strategy: made equiv fractions w/ 12 as denom

b. Fractions with a common denominator: $\frac{10}{12}$ and $\frac{9}{12}$

c. $\frac{5}{6} + \frac{3}{4} = \frac{10}{12} + \frac{9}{12}$ d. $\frac{5}{6} - \frac{3}{4} = \frac{10}{12}$

Estimate each sum and then solve. Show your work.

4 $\frac{2}{5} + \frac{1}{12}$

$\frac{2}{5} = \frac{24}{60}$
 $\frac{1}{12} = \frac{5}{60}$
 $\frac{24}{60} + \frac{5}{60} = \frac{29}{60}$

- about 3
 a little less than 4
 between 4 and 5

5 Estimate: a little less than 2

$\frac{3}{4} = \frac{9}{12}$
 $-\frac{1}{2} = \frac{-6}{12}$
 $\frac{9}{12} - \frac{6}{12} = \frac{3}{12} = \frac{1}{4}$

6 Estimate: little less than 6

$\frac{10}{5} = 2$
 $-\frac{4}{3} = \frac{-4}{3}$
 $2 - \frac{4}{3} = \frac{6}{3} - \frac{4}{3} = \frac{2}{3}$

Katie is training to run a marathon. She keeps track of how many miles she runs each day.

Training Day	Number of Miles
1	$8\frac{1}{8}$
2	$4\frac{3}{8}$
3	$12\frac{3}{4}$
4	$5\frac{1}{3}$
5	$9\frac{1}{8}$

7 How many more miles did Katie run on Day 1 than on Day 2?

Number model: $8\frac{1}{8} - 4\frac{3}{8} = m$

Estimate: little less than 4

Show your work: $7\frac{9}{8} - 4\frac{3}{8} = 3\frac{6}{8}$

Answer: $3\frac{6}{8}$ miles

How many miles did Katie run on Day 3 and Day 4 combined?

Number model: $12\frac{3}{4} + 5\frac{1}{3} = m$

Estimate: about 18

Show your work: $12\frac{9}{12} + 5\frac{4}{12} = 17\frac{13}{12} = 18\frac{1}{12}$

Answer: $18\frac{1}{12}$ miles

8 a. What is $\frac{1}{6}$ of 18? 3 $\frac{18}{6} = 3$

b. What is $\frac{4}{9}$ of 18? 12 $4 \times 3 = 12$

c. Fill in the blank to make a true number sentence.

$18 \times \frac{4}{6} = 12$

In Problems 9-12, write true or false. Do not multiply.

- 9 $\frac{3}{4} * \frac{7}{10}$ is less than $\frac{3}{4}$ F
 10 $\frac{7}{4} * \frac{11}{12}$ is greater than $\frac{11}{12}$ F
 11 $\frac{4}{5} * \frac{2}{9}$ is greater than $\frac{2}{9}$ but less than $\frac{4}{5}$ F
 12 $\frac{5}{6} * \frac{1}{4}$ is less than $\frac{5}{6}$ and less than $\frac{1}{4}$ F

When you multiply a fraction by a fraction less than 1, it's like finding only part of the other factor so the answer is less than you started with.