Math Connections for Parents

Welcome to Fifth Grade Module 3! Newark City Schools is using the EngageNY curriculum, which is aligned with Ohio's New Learning Standards. In Module 3, students will review how to make equivalent fractions, and will add and subtract fractions and mixed numbers by finding a common denominator. Students will then solve word problems involving fractions, and tell if answers are reasonable or make sense.

KEY STANDARDS

- Making equivalent fractions, with number lines, area models and numbers (such as finding like denominators)
- Add and subtract fractions with unlike denominators by finding equivalent fractions
- Solve two step word problems by adding and subtracting fractions
- Add and subtract fractions by making like units (add and subtract fractions that are greater than one, by finding equivalent fractions.
- Use fraction benchmarks (1/2, 1 whole, 1 1/2) to tell if an answer is reasonable before solving.

Important Words and Concepts

- Denominator: the bottom number of a fraction, fifths in 3 fifths
- Numerator: the top number of a fraction, 3 in 3 fifths
- Mixed number: a whole number with a fraction, greater than one whole, 2 2/3
- Unlike denominators (i.e. 1/8 and 1/7)
- Like denominators (i.e. 1/8 and 5/8)
- Equivalent fractions (i.e. 3/5 = 6/10)
- Benchmark fractions: ½ is a benchmark fraction when comparing 1/3 and 3/5
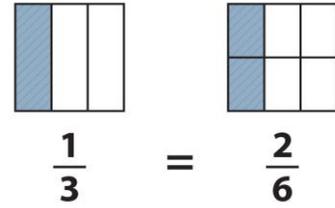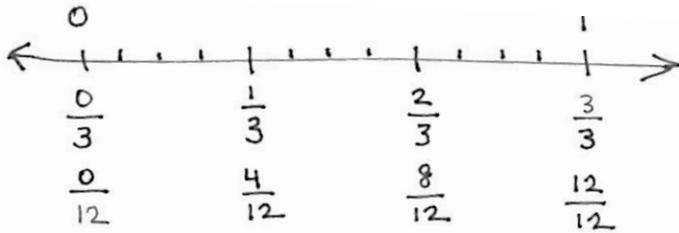- Making like units: finding a common denominator

Multiplying to find common denominators

Students do much work in this module to find like or common denominators. To do this, students need to have a solid base in both multiplication and division basic facts. Continue to work with your child on having a strong fact recall.

NEWARK CITY SCHOOLS
"Committed to Excellence. One Student at a Time."

For more resources, please visit www.newarkcityschools.org → Parent Math Academy K-5

Graphics and Strategies you may see…

A number line can be used to show equivalent fractions.

Example of a rectangular fraction model

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

$15\frac{5}{6} + 7\frac{9}{10}$ = on the right shows two different methods to solve, both finding like units or common denominators.

$$15\frac{5}{6} + 7\frac{9}{10}$$
$$= 22\frac{5}{6} + \frac{9}{10}$$
$$= 22\frac{50}{60} + \frac{54}{60}$$
$$= 22\frac{104}{60}$$
$$= 22\frac{60}{60} + \frac{44}{60}$$
$$= 23\frac{11}{15}$$

$$15\frac{5}{6} + 7\frac{9}{10}$$
$$= 22\frac{5}{6} + \frac{9}{10}$$
$$= 22\frac{25}{30} + \frac{27}{30}$$
$$= 22\frac{52}{30}$$
$$= 22\frac{30}{30} + \frac{22}{30}$$
$$= 23\frac{11}{15}$$

Sample Word Problem:

Gavin had 20 minutes to do a three-problem quiz. He spent 9 ¾ minutes of question 1 and 3 4/5 minutes on question 2. How much time did he have left for question 3? Write the answer in minutes and seconds.
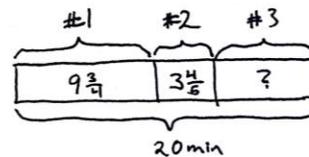
$$20 - 9\frac{3}{4} - 3\frac{4}{5}$$
$$= 19\frac{20}{20} - 9\frac{15}{20} - 3\frac{16}{20}$$
$$= 10\frac{5}{20} - 3\frac{16}{20}$$
$$= 9\frac{25}{20} - 3\frac{16}{20}$$
$$= 6\frac{9}{20}$$

$$6\frac{9}{20} = 6\frac{27}{60}$$
$$= 6\,min\ 27\,seconds$$

He had 6 minutes 27 seconds for question 3.