

1.3a Notes: Common Denominators and Comparing Numbers

te three equivalent fractions for examples below. *→ equal or same*

$\frac{1}{2} \cdot \frac{2}{2} = \frac{2}{4}$	Ex. $\frac{7}{3} \cdot \frac{2}{2} = \frac{14}{6}$	Ex. $\frac{3}{4} \cdot \frac{2}{2} = \frac{6}{8}$
$\frac{1}{2} \cdot \frac{3}{3} = \frac{3}{6}$	$\frac{7}{3} \cdot \frac{4}{4} = \frac{28}{12}$	$\frac{3}{4} \cdot \frac{4}{4} = \frac{12}{16}$
$\frac{1}{2} \cdot \frac{4}{4} = \frac{4}{8}$	$\frac{7}{3} \cdot \frac{6}{6} = \frac{42}{18}$	$\frac{3}{4} \cdot \frac{6}{6} = \frac{18}{24}$

What is the least common multiple of these numbers below?

3, 6, 4, 12, 2

LCM = 12

$3 \cdot 4 = 12$
 $6 \cdot 2 = 12$
 $4 \cdot 3 = 12$
 $12 \cdot 1 = 12$
 $2 \cdot 6 = 12$

What is the least common denominator of these numbers?

$\frac{1}{3}, \frac{5}{4}, 3\frac{2}{5}, 1, 2\frac{2}{3}$
 $3\frac{2}{5}, 1$

↳ bottom
(What is the LCM of the denominators?)

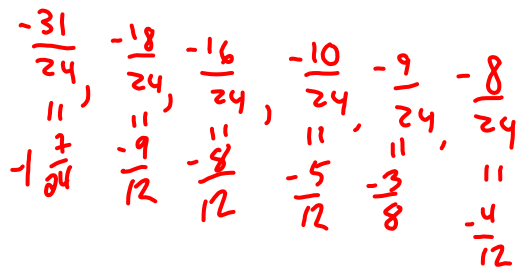
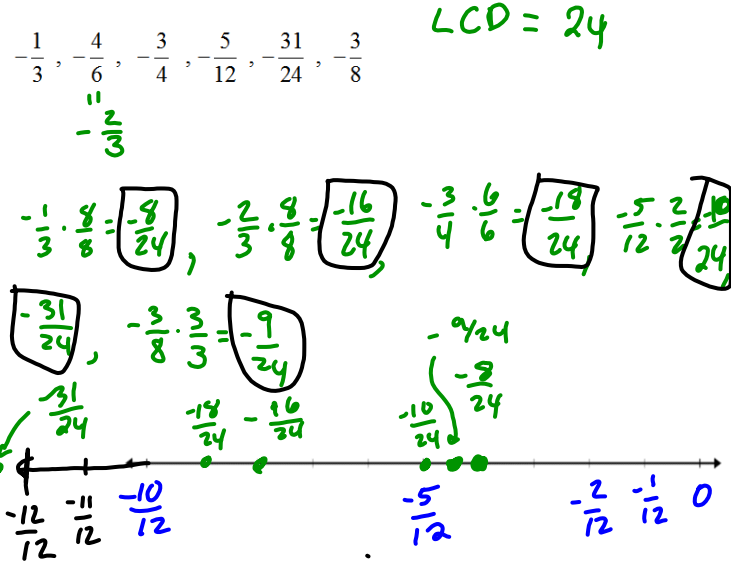
Largest denominator = 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, **60**

2nd Way: $5(4)(3)(1) = 60$

Write all numbers above with the same (common) denominator?

$\frac{1}{3} \cdot \frac{20}{20} = \frac{20}{60}$
 $\frac{5}{4} \cdot \frac{15}{15} = \frac{75}{60}$
 $3\frac{2}{5} \cdot \frac{12}{12} = 3\frac{24}{60}$
 $1 \cdot \frac{60}{60} = \frac{60}{60}$
 $2\frac{2}{3} \cdot \frac{20}{20} = 2\frac{40}{60}$

Write using the same denominator and place each on the number line.



TRY/HOMEWORK

What is the least common multiple of these numbers below?

2, 4, 10, 5, 3

Which of the following is NOT an equivalent fraction to $\frac{2}{3}$?

$\frac{14}{21}, \frac{4}{5}, \frac{4}{6}, \frac{12}{18}$

↪ equal

Keep 7 the same, and make fractions

Write using the same denominator and place each on the number line.

$$7\frac{1}{2}, 7\frac{3}{4}, 7\frac{3}{8}, 7\frac{5}{16}, \left(7\frac{8}{32}\right), 7\frac{1}{8}$$

have common
denominators

$$7\frac{2}{8}$$

$$7\frac{1}{4}$$



What is the least common multiple of these numbers below?

15, 10, 3, 5, 2, 1

Write three equivalent fractions for each number below.

3.4

$8\frac{2}{3}$

Write using the same denominator and place each on the number line.

$$-4.8, -4\frac{1}{5}, -4\frac{7}{10}, -4\frac{9}{15}, -4\frac{2}{3}$$

