

Name:

Period:

2-3 Notes

Int 1

Compare and Order Rational Numbers

Unit 2

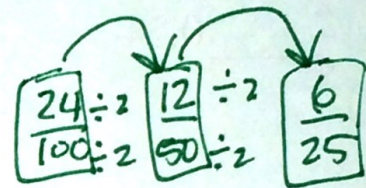
Rational Number: a number that can be written as a fraction.

HOW DO WE COMPARE DECIMALS & FRACTIONS?

① Turn everything into decimals. $\frac{3}{10} = .3$

Divide $\frac{3}{8}$ $8 \overline{)3}$

② Turn everything into fractions 0.24



* Need to have the same Denominator = Bottom #

Compare each set of numbers using the following symbols $<$, $>$ or $=$.

1) $0.65 > 0.47$

2) $0.70 > 0.39$

3) $0.914 > -0.73$

* Positives are ALWAYS BIGGER than negatives*

4) $-0.5 < 0.34$

5) $-0.67 < -0.41$

6) $-0.80 < -0.14$

7) $\frac{5}{8} < \frac{7}{8}$

8) $\frac{3}{7} > -\frac{2}{7}$

9) $-\frac{7}{9} < -\frac{4}{9}$

Compare each set of numbers using the following symbols $<$, $>$ or $=$.

10) $\frac{7.3}{12.3} > \frac{8.2}{18.2}$

Handwritten notes: $\frac{21}{36} > \frac{16}{36}$ (with arrows pointing to the numerators of the original fractions). Below the fractions, the digits are circled: 6, 2, 3, 2 for the first fraction and 6, 3, 3, 2 for the second.

11) $\frac{5}{6} > -\frac{7}{9}$

12) $-\frac{9.10}{16.10} > -\frac{7.10}{10.10}$

Handwritten notes: $-\frac{90}{100} > -\frac{112}{100}$

13) $0.68 > -\frac{8}{18}$

Handwritten notes: $3.2.2 > 3.2.3.2$ (with 3 and 2 circled in each number)

14) $-0.82 > -\frac{7}{8}$

Handwritten notes: -0.820 and -0.875 are circled. A long division problem is shown: $8 \overline{) 7.000}$ with steps: $8 \overline{) 7.0} \rightarrow 8 \overline{) 7.00} \rightarrow 8 \overline{) 7.000}$ resulting in 0.875 .

15) $0.6 < \frac{2}{3}$

Handwritten notes: $0.6000 < 0.6666$

16) $\frac{2}{9} < 0.24$

17) $-\frac{5}{11} > -0.511$

Handwritten notes: $0.\overline{2} = 0.222...$ and 0.24

Handwritten notes: $-0.\overline{45} = -0.4545...$ and -0.511

Order each set of numbers from least to greatest.

18) $\frac{4}{5}, \frac{2}{5}, \frac{3}{5} = \frac{-3}{5}, \frac{-2}{5}, \frac{4}{5}$

19) $-\frac{1}{3}, 0.56, -0.8, \frac{2}{3} = -0.8, -\frac{1}{3}, 0.56, \frac{2}{3}$

Handwritten notes: $-\frac{1}{3} = -0.33...$, $\frac{2}{3} = 0.66...$

20) $-\frac{1}{4}, -0.3, -0.100 = -0.25, -\frac{1}{4}, -0.100$

Handwritten notes: $-0.250, -0.300, -0.100$