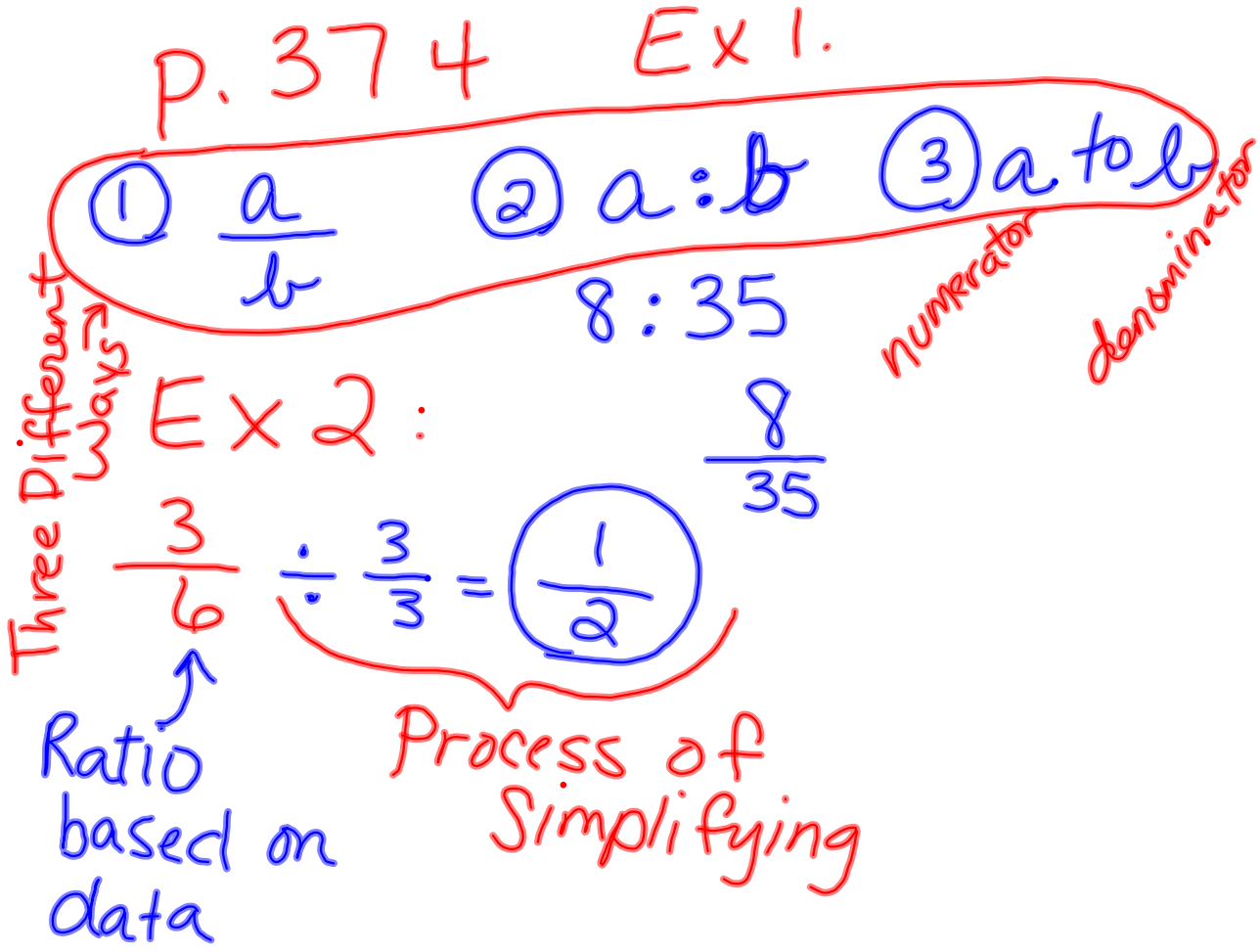
2/23 8.1 Ratios

RATIO: A RATIO of a # a to a nonzero number b is the quotient when a is divided by b.

$a:b$ $\frac{a}{b}$

* a ratio is a way to compare numbers as parts of a whole TO the whole.


p. 374 Ex 1.
① a/b
② a:b
③ a to b
8:35
numerator
denominator
Three Different Ways
Ex 2:
8/35
3/6 ÷ 3/3 = 1/2
Ratio based on data
Process of Simplifying

$$\frac{\text{violins}}{\text{violas}} = \frac{18}{8} \div \frac{2}{2} = \frac{9}{4}$$

$$\frac{18}{1} \quad 18:1$$

$$\frac{5}{1} \quad 5:1$$

p. 374 #s 1-3

① $18:35$, $\frac{18}{35}$, 18 to 35

② $\frac{8}{3}$, $8:3$, 8 to 3

③ $\frac{6}{18} \div \frac{6}{6} = \frac{1}{3}$, $1:3$, 1 to 3

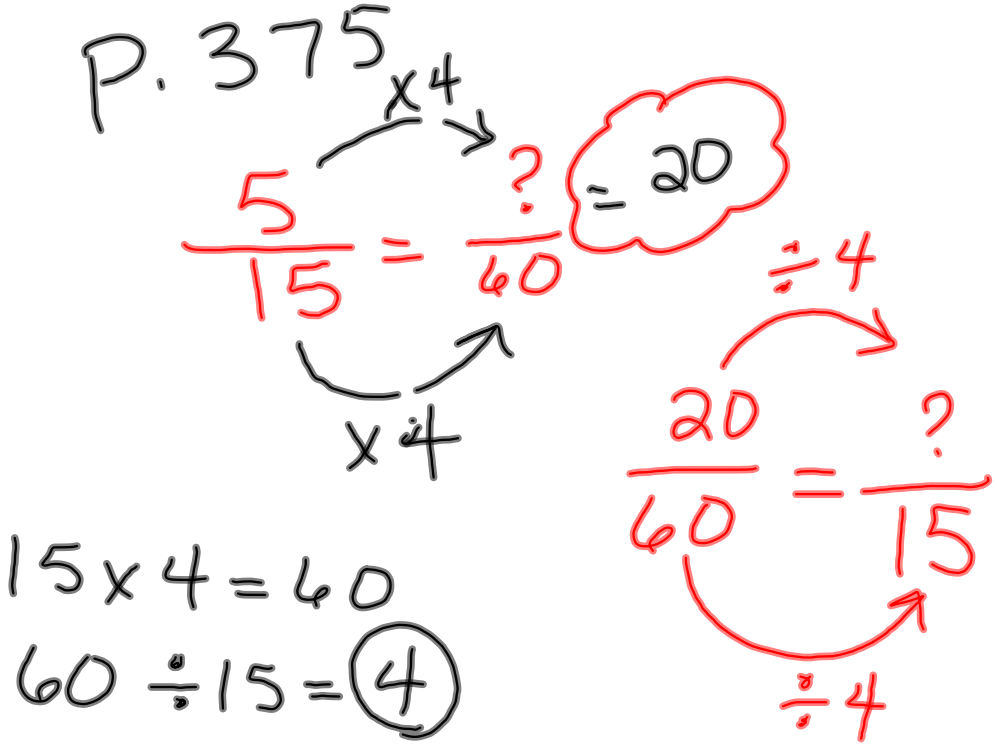
Equivalent Ratios

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

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

one to three is equivalent to four to twelve

P. 375



$15 \times 4 = 60$

$60 \div 15 = 4$

p. 375 Ex 4

Allen $\frac{3}{4}$ $4\overline{)3.00}$ $= 0.75$

Mike $\frac{7}{10}$

$$\begin{array}{r} .75 \\ 4\overline{)3.00} \\ -28 \\ \hline 20 \end{array}$$

$$\begin{array}{r} .7 \\ 10\overline{)7.0} \end{array} = 0.70$$

$0.75 > 0.70$

P. 375 #s 4-9

④ $\frac{2}{3} = \frac{10}{15}$

⑤ $\frac{7}{10} = \frac{35}{50}$

⑥ $\frac{20}{32} = \frac{5}{8}$

⑦ $\frac{5}{20} < \frac{4}{10}$

⑧ $\frac{3}{5} =$ 18 out of 30

⑨ $2:4 > 7:35$

In Class:

p. 376 #s 1-19

HW:

WS 8.1

#s 1-20