# Order of Operations

with

# Rational Numbers

$(-0.8) + 1.2 \div (-0.3) \times 1.5$


$= (-0.8) + -4 \times 1.5$

$= (-0.8) + -6$

$= -6.8$

4. $\left(-\frac{1}{2}\right)^2 - \left(-\frac{2}{3}\right) \div \left[\frac{1}{3} + \left(-\frac{3}{12}\right)\right]$


Please erase to reveal answer


$= \left(-\frac{1}{2}\right)^2 - \left(-\frac{2}{3}\right) \div \left[\frac{4}{12} + \left(-\frac{3}{12}\right)\right]$

$= \left(-\frac{1}{2}\right)^2 - \left(-\frac{2}{3}\right) \div \left[\frac{1}{12}\right]$

$= \left(+\frac{1}{4}\right) - \left(-\frac{2}{3}\right) \div \left[\frac{1}{12}\right]$

$= \left(+\frac{1}{4}\right) - \left(-\frac{2}{3}\right) \times \frac{12}{1}$

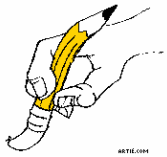
$= \left(+\frac{1}{4}\right) - \left(-\frac{2}{\cancel{3}_1}\right) \times \frac{\cancel{12}^4}{1}$

$= \left(+\frac{1}{4}\right) - \left(\frac{-8}{1}\right)$

$\left(+\frac{1}{4}\right) + \left(\frac{32}{4}\right)$

$= \frac{33}{4}$

# Using the Order of Operations with Fractions



Remember fractions are just numbers

1) $\left(-\frac{3}{5}\right)\left(\frac{2}{5}\right)-\left(\frac{7}{30}\right)\div\left[\frac{1}{2}+\left(-\frac{1}{6}\right)\right]$

$\left(-\frac{3}{5}\right)\left(\frac{2}{5}\right)-\left(\frac{7}{30}\right)\div\left[\frac{3}{6}+\left(-\frac{1}{6}\right)\right]$

$\left(-\frac{3}{5}\right)\left(\frac{2}{5}\right)-\left(\frac{7}{30}\right)\div\left[\frac{2}{6}\right]$

$\left(-\frac{3}{5}\right)\left(\frac{2}{5}\right)-\left(\frac{7}{30}\right)\div\left[\frac{1}{3}\right]$

$\left(\frac{-6}{25}\right)-\left(\frac{7}{30}\right)\times\left[\frac{3}{1}\right]$ (3 crossed out, 1 above; 30 crossed out, 10 below)

$\left(\frac{7}{10}\right)\times\left[\frac{1}{1}\right]$

$\frac{-6}{25}-\frac{7}{10}$

$\frac{-12}{50}-\frac{35}{50}$

$\frac{-47}{50}$

# Do we need more practice?

1)

$$\left(-1\frac{3}{4}\right)-\left(-3\frac{1}{2}+5\right)\left(-3\frac{1}{2}+5\right)$$

Remember to switch mixed to improper fractions

Make common denominators inside brackets

Complete Brackets

Multiply

3. The following formula is used to convert Fahrenheit to Celsius, where C represents celsius and the F is Fahrenheit.


$$C = \frac{F - 32}{1.8}$$

Use the formula to convert 18°F to Celsius.

ERASE to see answer

$$C = \frac{18 - 32}{1.8} \qquad \frac{18}{1.8} - \frac{32}{1.8}$$

$$C = \frac{-14}{1.8}$$

$$C = -7.77$$

# Class / Homework

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7 a,b d
8 a,b
10
12 a,d
13 a,d

Write out the questions and show all work!
(Hint take your time and do one step at a time)