

Grade 9
Warm Up
 Hand in

1) Identify whether the number is rational or irrational

$\frac{3}{4}$	-3.286754....	$1.\overline{66}$	-0.33	1.85
Q	Q	Q	Q	Q

2) Arrange the fractions from least to greatest: (Show work)

$\frac{15}{18}$ $\frac{-12}{17}$ $\frac{13}{15}$ $\frac{16}{15}$ $\frac{-4}{13}$ $\frac{-3}{11}$
 $0.8\overline{3}$ -0.71 $0.8\overline{6}$ $1.0\overline{6}$ -0.31 $-0.2\overline{7}$

$0.2 = \frac{1}{5}$

3) Express decimal as a mixed fraction in simplest form.

a) $0.4 = \frac{2}{5}$ b) $-3.2 = -3\frac{2}{5}$ c) $1.125 = 1\frac{125}{1000} = 1\frac{1}{8}$

4) Determine each sum.

a) $\frac{-6}{5} + \frac{-2}{5} = \frac{-8}{5} = -1\frac{3}{5}$ b) $\frac{-3}{4} + \frac{5}{6} = \frac{-9}{12} + \frac{10}{12} = \frac{1}{12}$
 c) $-3\frac{2}{7} + 2\frac{1}{4}$ d) $-32.75 + 18.73$



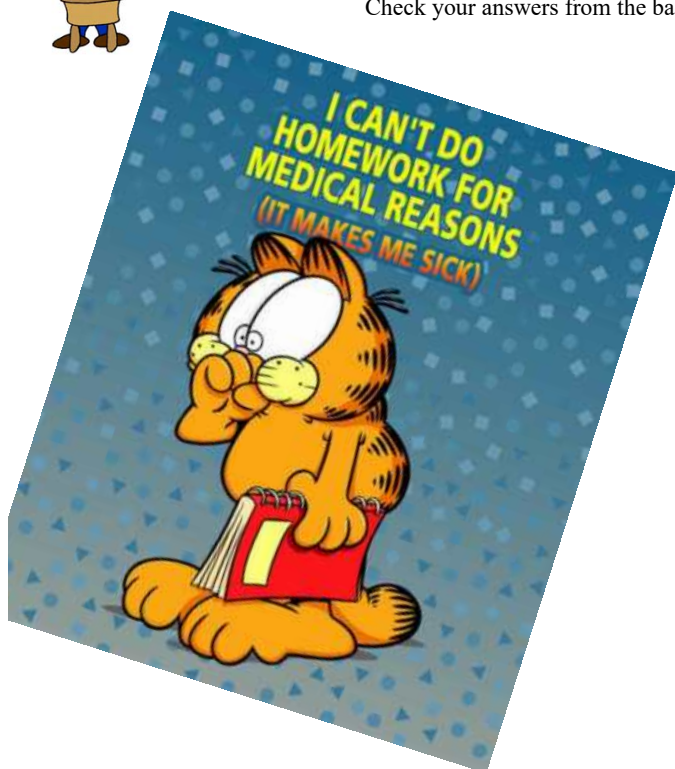
Any Homework Questions?

Check your answers from the back of the textbook



Page 119

6 , 7,



6. Which of the following expressions have the same answer as $-\frac{3}{10} - \frac{9}{5}$?
How do you know?

a) $-\frac{3}{10} \checkmark \left(-\frac{9}{5}\right)$ b) $\frac{3}{10} - \frac{9}{5}$

c) $\left(-\frac{9}{5}\right) - \left(-\frac{3}{10}\right) \checkmark$ d) $\frac{9}{5} - \frac{3}{10}$

7. Use integers to estimate each difference.
Then, determine each difference.

a) $10.8 - 3.5$ b) $-37.23 - 48.54$
 7.3

c) $50.06 - (-14.67)$ d) $64.19 - 95.76$
 64.73

e) $-28.31 - 9.72$ f) $70.59 - (-81.25)$
 -38.03

Subtracting Negative Numbers

$$8 - (-2) \longrightarrow \text{We add the opposite: } 8 + 2 =$$

No difference with rational numbers

$$\frac{6}{5} - \left(-\frac{10}{5}\right) \longrightarrow \text{We add the opposite: } \frac{6}{5} + \frac{10}{5} =$$

Subtracting Rational Numbers in Mixed Number Form

$$3\frac{1}{5} - 2\frac{7}{10}$$

STEP 1) Write each mixed number as an improper fraction

$$\frac{16}{5} - \frac{27}{10}$$

STEP 2) Find common denominators and then subtract like before

$$\frac{32}{10} - \frac{27}{10}$$

$$\frac{5}{10} = \frac{1}{2}$$

STEP 3) Reduce all fractions

Your Turn



$$\begin{aligned}
 1) \quad & -2\frac{2}{9} - 3\frac{1}{3} \\
 & -\frac{26}{9} + \frac{10}{3} \\
 & -\frac{26}{9} + \frac{30}{9} \\
 & \frac{10}{9} = 1\frac{1}{9}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 6\frac{1}{2} - 3\frac{1}{7} \\
 & \frac{13}{2} - \frac{22}{7} \\
 & \frac{91}{14} - \frac{44}{14} \\
 & \frac{47}{14} = 3\frac{5}{14}
 \end{aligned}$$

Class/Homework

Page 119 - 120

9 d, e, f

11

13 c, d

14a, c

15 ab

subtracting

Page: 121

Questions:

2, 3, 4ad, 5b(i, ii, iii), 6, 7, 8, 9)

mid-unit
review