

Lesson 4: Adding DecimalsNov 7th, 2022

2 different procedures:

Procedure 1:

→ when decimals
have same signs

Recall:

+ +

- -

Procedure 2:

→ when decimals
have different signs

+ -

- +

Adding when Decimals \bar{w} same

ex. Your dinner cost 67.36\$

Sign:

and you give a bad tip of 5.14\$.

$$67.36 + 5.14$$

$$\begin{array}{r} 67.36 \\ + 5.14 \\ \hline 72.50 \end{array}$$

step i. Put #'s on top of each other aligned according to decimal (\bar{w} signs)

step ii. Add (even if 2 -).

step iii. Insert decimal in same spot

step iv. Final answer has same sign as #'s.

ex. Evaluate:

$$35.187 + 2.04$$

$$\begin{array}{r} 35.187 \\ + 2.040 \\ \hline 37.227 \end{array}$$

adding zeros
equivalent #

ex. Evaluate

$$0.36 + 12$$

where's the decimal?

$$\begin{array}{r} 0.36 \\ 12.00 \\ \hline 12.36 \end{array}$$

$$ex. 0.007 + 0.003$$

$$= 0.010$$

$$or 0.01$$

you do 1st round

Decimals

ex. Pia missed class once, so she owes me 0.25 \$. She missed again, so she owes me another 0.50 \$.
 evaluate: $-0.25 + (-0.50)$

$$\begin{array}{r} 0.25 \\ 0.50 \\ \hline 0.75 \end{array} \quad \text{final answer: } -0.75 \$$$

step i. Put #'s on top of each other aligned according to decimal (̄ signs)

step ii. Add (even if 2 -).

step iii. Insert decimal in same spot

step iv. Final answer has same sign as #'s.

ex. Ava withdrew 1.65 \$ and another 1.81 \$ from her bank account.

$$-1.65 + (-1.81)$$

$$\begin{array}{r} 1.65 \\ 1.81 \\ \hline 3.46 \end{array}$$

final answer:
 $-3.46 \$$ represents
 Ava's bank activity

you do:

$$-1.40 + (-2.22)$$

$$\text{ans } (-3.62)$$

$$-4.72 + (-2.32)$$

$$\text{ans } (-7.04)$$

+ 2nd handout

Adding 2 Decimals w DifferentSigns : + -

ex. I owe Sabrina
 0.75 \$ and I give her
 0.25 \$. How much do I
 still owe her?

$$0.25 + (-0.75)$$

$$\begin{array}{r} 0.75 \\ 0.25 \\ \hline 0.50 \end{array}$$

$$-0.50$$

step i. Put #
 furthest away from
 zero on top of
 other # aligned
 to decimal w/out signs

step ii. Subtract
 and put decimal in
 same spot

step iii. Give the final
 answer the same sign
 as the number that
 was furthest from zero
 (the # that has the greatest
 absolute value)

ex $0.80 + (-1.20)$

$$\begin{array}{r} 1.20 \\ 0.80 \\ \hline 0.40 \end{array}$$

$$-0.40$$

check
 w
 calculator

ex You buy a pair of jeans that cost \$75.99. You receive a \$27.60 discount.

$$\$75.99 + (-\$27.60)$$

$$\begin{array}{r} 75.99 \\ -27.60 \\ \hline 48.39 \end{array}$$

∴ you will pay \$48.30

ex : Evaluate:

$$-22.10 + 17.80$$

$$\begin{array}{r} 22.10 \\ -17.80 \\ \hline 04.30 \end{array}$$

final answer: -4.30

so long as you put the bigger number on top, you'll always be able to take from the digits to the left!

You do handouts!