

Math 20, Tuesday, 1/24

Please turn in assignment 1 and quiz 1

New class calendar

Questions

New material : 2.1, 2.2

Student Info sheet handed out - due Thurs

Take-home quiz 2 handed out - due next
Tues

Quiz 3 in class on Thurs - up to 1.9

Webwork up to 1.9 due tonight

Questions

$$\begin{array}{r} \times \\ 14 \\ \times 23 \\ \hline 42 \\ + 280 \\ \hline 322 \end{array}$$

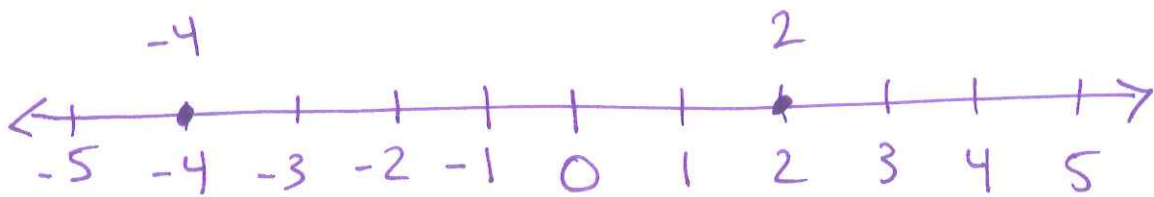
$$\begin{array}{r} \times \\ 87 \\ \times 92 \\ \hline 174 \\ + 7830 \\ \hline 8,004 \end{array}$$

$$\begin{array}{r} \swarrow 86 \\ 5 \overline{) 430} \\ \swarrow \downarrow \\ \underline{-40} \downarrow \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

$$\begin{array}{l} 430 \div 5 = 86 \\ 8 \times 5 = 40 \\ \rightarrow \frac{430}{5} = 86 \end{array}$$

Chapter 2 - Integers

Section 2.1



opposite:

opposite of 6 is -6

opposite of -2 is 2

$$-(-2) = 2$$

"-6"
↑
the opposite
of 6
negative 6

examples:

money

temperature

lab values

absolute value - turns the number
inside positive

$$|3| = 3$$

$$|-3| = 3$$

$$-|3| = -3$$

↓

$$= -3$$

acts as a grouping
symbol, like () or []

$$|7 + 4|$$

$$= |11|$$

$$= 11$$

$$\begin{array}{c} -|-3| \\ \downarrow \\ = -3 \end{array}$$

Webwork 2.1

1. 7 deg below zero -7 deg

accelerating at a rate
of $100 \frac{m}{s^2}$

$100 m/s^2$

Section 2.2 - Adding Integers

Examples

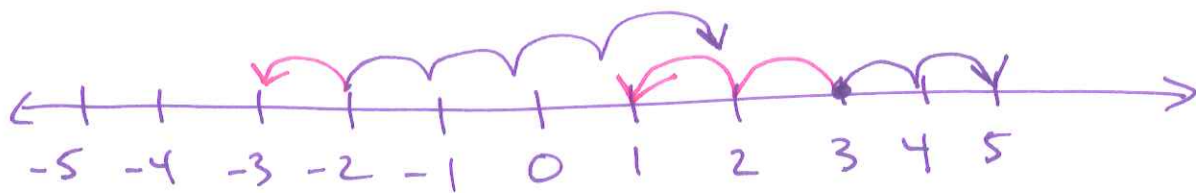
1. You get ~~paid~~ paid \$100 and then you get paid \$50
 $\$100 + 50$
 $\$150$
 $\rightarrow 100 + 50 = 150$
2. You get paid \$100 and then spend \$50.
 $\rightarrow 100 + (-50) = 50$
3. You spend \$100 and then get paid \$50.
 $\rightarrow -100 + (50) = -50$
4. You spend \$100 and then you spend \$50.
 $\rightarrow -100 + (-50) = -150$

Same signs \rightarrow add the values
and keep the sign

opposite signs \rightarrow take the difference (subtract)
and use sign of the "larger"

Examples: $10 + (-7) = 3$ you have \$10 and spend \$7.
 $-13 + 2 = -11$ down by 13 and get 2 back
 $-14 + (-10) = -24$ spend 14, spend 10

Number Line



$$3 + \overset{\text{right}}{2} = 5$$

$$-2 + \overset{\text{right}}{4} = 2$$

$$3 + \overset{\text{left}}{(-2)} = 1$$

$$-2 + \overset{\text{left}}{(-1)} = -3$$