Math 8 Date:_____

8.4 Notes: Dividing Integers

Complete the following table:

Multiplication Statement	Division Statement	A different division statement
(+4) x (-3) = -12	(-12) ÷ (-3) =+4	(-12) ÷ (+4) =-3
(-5) x (-2) = +10	(+10) ÷ (-5) = -2	(+10) ÷ (-2) = -5
(-4) x (+5) = -20	(-20) ÷ (-4) = +5	(-20) ÷ (+5) = -4
(+2) x (+7) = +14	(+14) ÷ (+7) = +2	(+14) ÷ (+2) = +7
(+8) x (-3) = -24	(-24) ÷ (-3) = +8	(-24) ÷ (+8) = -3
(-6) x (-3) = +18	(+18) ÷ (-3) = -6	(+18) ÷ (-6) = -3

What do you notice about the sign of the quotient in a division question?

same sign rules as multiplication

There is a ***Sign Rule*** for division of integers, just as with multiplication:

(+) ÷ (+) = (+)	(+) ÷ (−) = (−)
(−) ÷ (−) = (+)	(−) ÷ (+) = (−)

Anakin borrows $120 from Obi Wan to buy Padme a new tiara. He promises to pay it back over 4 months. Represents Anakin's money for each month.

(-120) ÷ (+4) = -30

It's very cold in space, and R2D2 has fallen out of the airlock. In 20 minutes, his temperature will drop by 40 degrees. What is his temperature change per minute?

(-40) ÷ (+20) = -2

p297 #4,5,7-13,16, 19-22, 25

p310 #7-10, 11-15, 18, 21