Find the product

1. +4 x +7 = 28
2. +3 ● -10 = -30
3. -8 x -2 = 16
4. (-4)(+9) = -36

Find the quotient

1. +9 ÷ -3 = -3
2. -10 ÷ -5 = 2
3. $\frac{+14}{+7}= $2
4. $\frac{-16}{+2}=$ -8

Sign Rule for multiplication

* When you multiply two integers with the same sign, the answer is positive

 + x + = + - x - = +

 Ex -2 x -3 = +6

* When you multiply two integers with the different signs, the answer is negative

 + x - = - - x + = -

 Ex -2 x 3 = -6

Sign Rule for Division

* When you dividing two integers with the same sign, the answer is positive

 + ÷ + = + - ÷ - = +

Ex -6 ÷ -2 = +3

* When you dividing two integers with the different signs, the answer is negative

 + ÷ - = - - ÷ + = -

Ex -6 ÷ 2 = -3

1. Rohan can climb stairs at a rate of 2 steps per second. If it takes him 18 seconds to climb up a staircase. how many steps did he go up?

$\frac{2 steps}{s}$ 18 seconds 18 seconds x $\frac{2 steps}{s}$

 Rohan went up 36 stairs in 18 seconds.

1. Ken pays $35/month to charity. How much does he deduct from his account in 1 year?

- $\frac{\$35}{month}$ $\frac{12 months}{year}$ -$ \frac{\$35}{month}$ x $\frac{12 months}{year}$

 = -$ \frac{\$420}{year}$

 Ken deducts $420 annually (yearly)

1. It’s very cold in space, and R2D2 has fallen out of his X-wing. In 20 minutes, his temperature will drop by 40 degrees. What is his temperature change per minute?

-40° ÷ 20 minutes = $\frac{-40°}{20 minutes}$

 = -2°/min

 R2D2 temperature dropped 2 degree per minute.

1. Can you predict POSITIVE or NEGATIVE

(-) x (-) = +

(-) x (+) = -

(-) x (-) x (-) = -

(-) x (-) x (-) x (-) = +

Even # of negative signs 🡪 positive

Odd # of negative signs 🡪 negative

(-) x (-) x (-) x (-) x (-) x (-) x (-) x (-) = +

(-) x (-) x (-) x (-) x (-) x (-) x (-) = -

When good things, happen to good people, that’s good!

+ • + = +

When bad things, happen to bad people, that’s good!

– • – = +

When good things, happen to bad people, that’s bad!

+ • – = –

When bad things, happen to good people, that’s bad!

– • + = –