

WEEK TWO - Activity Two - Toblerone Fractions

1. Warm Up

Put this puzzle up as a warm up. It is a little easier than last week's puzzles, and this is a good time to build confidence with this type of logic problem. Have students try this one alone.

Sign #2 cannot be true, since it then declares itself false. Therefore, sign 2 is true, and sign 1 is false, and the lady is behind Door 2.

Rules: One sign is true and one is false.
There is one lady and one tiger. Where is the lady?

Door One	Door Two
T	?
F	?

Sign on Door ONE



Sign on Door TWO



2. Toblerone Fractions

We buy a 3 or 4 Toblerone bars for this activity.
(Costco has the best deal.)

Toblerone bars are chocolate bars from Switzerland, and each bar has 12 "peaks", or segments.

Put on Latex gloves if you like, and lay out one of the unwrapped bars on a tablet.



Call on different students to tell you how much chocolate each of the following people has.

You can leave the original bar (For Mr. "A") at the top of your plate, and build each one of the following fractions below it. We remove each fraction (except A) as we go through, otherwise we'd run out of chocolate.

"A" has 12 twelfths

"B" has half as much as "A"

"C" has $\frac{1}{3}$ as much as "A"

"D" has $\frac{1}{12}$ MORE than $\frac{1}{2}$ as much as "A"

"E" has $\frac{3}{4}$ as much as "A"

"F" has one twelfth less than twice as much as "B"

"G" has as much as "A" and "B" together.

"H" has $1\frac{1}{2}$ times as much as "A"

Answers: b) $\frac{6}{12}$, c) $\frac{4}{12}$, d) $\frac{7}{12}$, e) $\frac{9}{12}$, f) $\frac{11}{12}$, g) $\frac{18}{12}$, h) $\frac{18}{12}$ (= $1\frac{1}{2}$)

The LAST question is a hard one. We often get answers of $\frac{18}{12}$, $\frac{30}{12}$, and others. We have the students discuss this until they come to a consensus BEFORE we pass out the chocolate equally! (Someone finally suggests that TIMES ONE would be $\frac{12}{12}$, TIMES TWO would be $\frac{24}{12}$. Therefore TIMES $1\frac{1}{2}$ has to be in between 12 and 24, and $\frac{18}{12}$ wins)