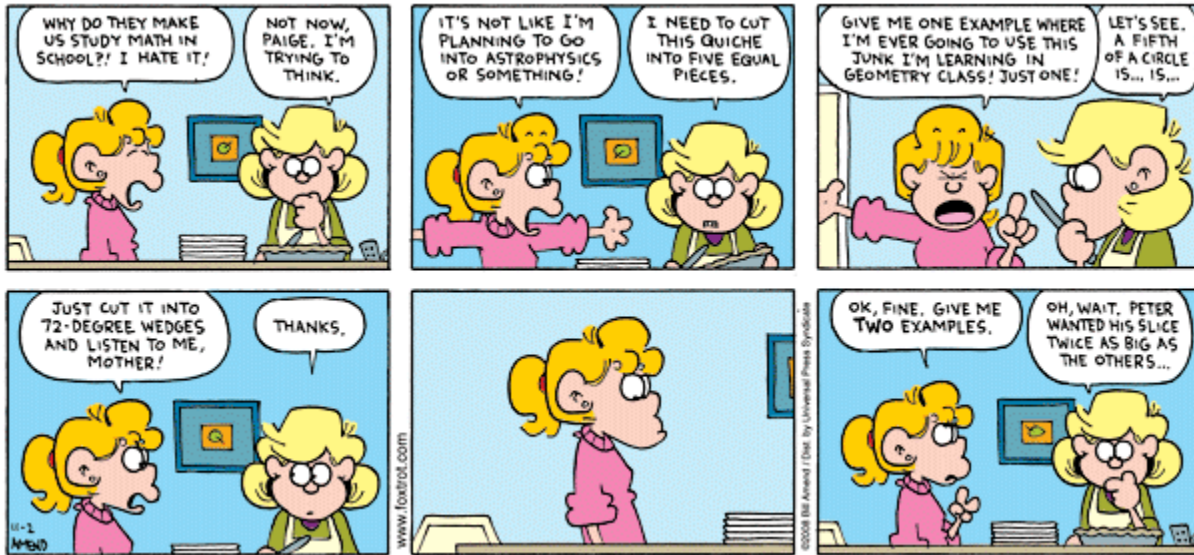


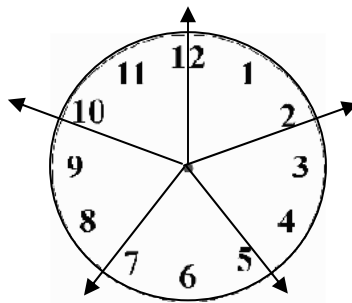
Time to study angles!

A circle has 360° . If Paige from the cartoon below knows this, then everyone probably does.



Paige knew that 360° divided by five would be 72° . Now how do we show Mom how big 72° is?

Picture a clock. One with a round face and hands, not digital. The clock face has 360. It also has 60 minutes. So if we divide 360° by 60 minutes, each minute on the clock represents six degrees. So if Mom visualizes the clock face on the quiche, then cuts it at 12, 24, 36, 48 and 60 minutes, she'll have five equal pieces!



Clock Angles

1 Minute = 6°
5 Minutes = 30°
10 Minutes = 60°
12 minutes = 72°
15 Minutes = 90°
20 Minutes = 120°
30 Minutes = 180°

Now let's look at Mom's second problem: One of her family wants his slice to be twice as large as the others. So we still need five slices, four of them equal, and the fifth one twice the size of the others. How about:

$$x + x + x + x + 2x$$

And these slices all still make up our circular quiche, which is 360. Therefore, we get the equation:

$$\begin{aligned} x + x + x + x + 2x &= 360 \\ \text{or } 6x &= 360 \\ \text{so } x &= 60 \end{aligned}$$

So four family members get a 60° slice (or 10 minutes) and Peter gets a 120° slice (or 20 minutes).

