



Target:

1. The hens laid 46 eggs. Then they laid 4 more eggs. Farmer Bing wanted to divide the eggs equally into 5 boxes. How many eggs did he put in each box?
2. What is the smallest positive integer with 8 factors?
3. The 6-digit numeral $8AA3A1$ is divisible by 11. What digit does A represent?
4. What is the measure of each internal angle in a regular dodecagon (12 sided-polygon)?
5. Emily has 21 dimes. She places them in three piles, with an odd number of dimes in each pile. In how many different ways can she accomplish this? [Consider piles of 1,1, and 19 dimes, for example, to be equivalent to piles of 1, 19 and 1 dimes.]
6. Jay lives at the coordinates $(0,0)$ and his school is at $(3,2)$, how many possible routes can Jay take to go to school if he can only walk up or right along the gridlines?
7. Tracy's Trophies charges by the letter for engraving. There is one fee for each vowel and a different fee for each consonant. CAROL costs \$31 to engrave and GABRIEL costs \$43 to engrave. How many dollars does BRIDGET cost to engrave?
8. Two boys and six girls are seated randomly in 8 chairs around a circular table. Express as a fraction, in lowest terms, the probability that the two boys are seated next to each other.