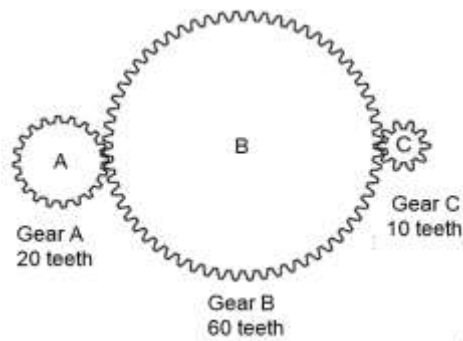




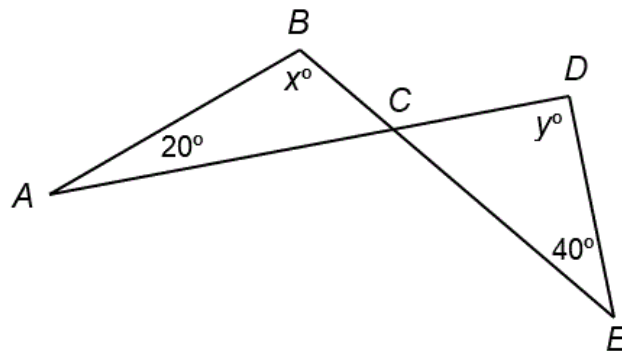
Gordon Burgin's Puzzles

March 2021 challenge

1. The turning of Gear A causes Gears B and C to turn as well. If Gear A is rotated by the motor at a rate of 100 rpm, what is the number of revolutions per minute for Gear C



2. In the figure below, line AD intersects line BE at C. If angle $x^\circ = 100$, what is the value of angle y° ?



3. Between 1497 and 1500, Amerigo Vespucci embarked on two voyages to the New World. According to Vespucci's letters, the first voyage lasted 43 days longer than the second voyage, and the two voyages combined lasted a total of 1,003 days. How many days did the second voyage last?