REC for Cortex 3.5 Activity: Gear Trains - Fundamental Class/Period: Date: Name: **Question Sheet Question 1** Determine the gear ratios for each of the gear trains in Table 1 using gear teeth. Question 2 How does the gear ratio calculated using the number of revolutions differ from the gear ratio calculated using gear teeth? **Question 3** What rotational speed would be produced by a Vex motor with a free spin of 100 RPM attached to a 36T driver gear mating with a 12T output gear? **Question 4** What effect on motor speed is produced by a gear train consisting of gears that progress from a small driver gear to a larger output gear?



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Question 5	In the original gear train for this activity, you used three 36T gears to construct a gear train. What is the gear ratio of that gear train?
Question 6	How did you calculate the compound gear ratio of the gear train? Explain in full.
Question 7	What would the angular velocity of a drive train be if you attached a similar compound gear train to a Vex motor?

