Give a brief explanation of what a **Pulley Systems** is:

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_____

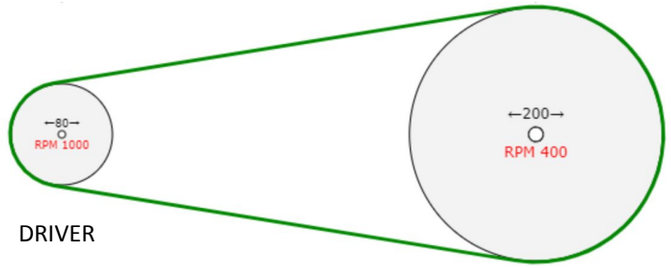
NAME:_____

DATE:_____

1). Sketch a pulley system with a **Mechanical advantage** of 3 and intricate in a sentence how you can determine it is 3.

2). Name the mechanism shown and its parts. Describe how it works and highlight a number of advantages to it.

3). Using the diagram below, calculate (i) the **velocity ratio** and (ii) the **speed** of the driven pulley.



DRIVER

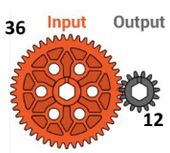
DRIVEN

2). Draw 4 types of **CAMs** and name them and their parts.

3). Draw and label the 4 types of **Belt Drives**.

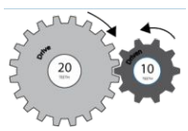
4). Explain what a **Gear Train** is in comparison to **Compound Gears**. Use neat sketches to express your answer.

5). Calculate the **Gear Ratio** for you model made. Complete the formula first.

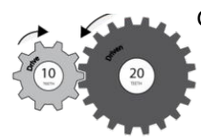


GEAR RATIO = =

6). Explain the following.



OVERDRIVE =



GEAR REDUCTION =

7). Draw a neat sketch, label and explain each type of Gear system.

WORM & GEAR

BEVEL GEAR

RACK & PINION

CHAIN & SPROCKET