



GEAR RATIOS



A _____ IS A GEAR THAT IS CONNECTED TO THE MOTOR OR THAT TURNS ANOTHER GEAR.

A _____ IS A GEAR THAT IS TURNED BY A DRIVER.

CAN A DRIVEN BE A DRIVER? WHY?

HOW DO YOU FIND THE TEETH RATIO?

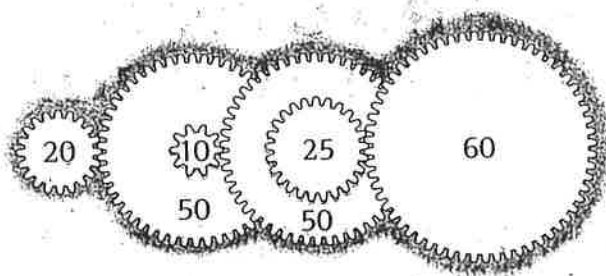
IF MY DRIVERS HAS 15 TEETH AND MY DRIVEN HAS 45 TEETH WHAT IS MY EQUATION?

CAN IT BE REDUCED?

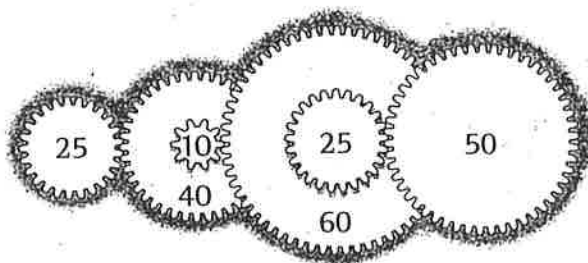
WHAT DO I NEED TO DO TO FIND MY GEAR RATIO?

FIND THE GEAR RATIO:

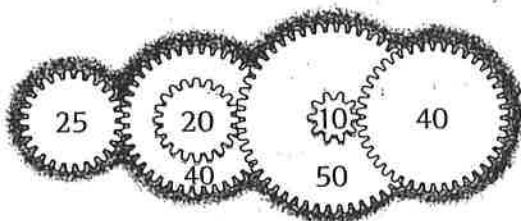
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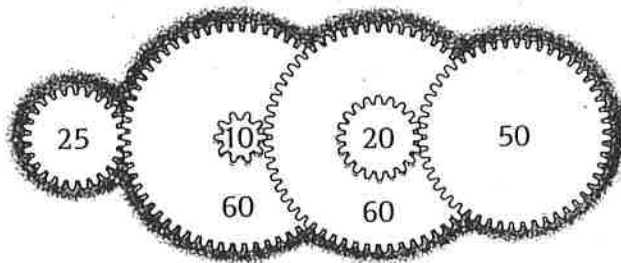
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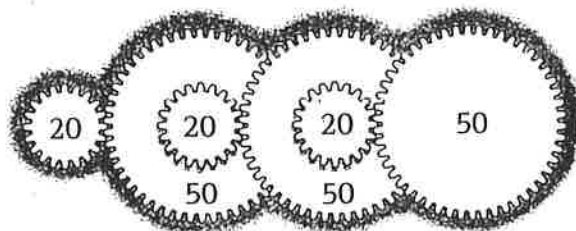
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6.



7.



GEAR RATIO RECORDING TABLE

| Drawing of Gear Pair (driver, driven) | Teeth on Driver Gear | Teeth on Driven Gear | Teeth Ratio (driver: driven) | Rotations of Driver Gear | Rotations of Driven Gear | Gear Ratio (driver rotations: driven rotations) |
|---|-------------------------|-------------------------|---------------------------------------|-----------------------------|-----------------------------|---|
| | 15 | 45 | | | | |
| | 45 | 15 | | | | |
| | 15 | 75 | | | | |
| | 75 | 15 | | | | |
| | 45 | 75 | | | | |
| | 75 | 45 | | | | |

GEAR RATIO PRACTICE SHEET

| Drawing of Gear Pair (driver, driven) | Teeth on Driver Gear | Teeth on Driven Gear | Teeth Ratio (driver: driven) | Rotations of Driver Gear | Rotations of Driven Gear | Gear Ratio (driver rotations: driven rotations) |
|---------------------------------------|----------------------|----------------------|------------------------------|--------------------------|--------------------------|---|
| | 15 | 60 | 1:4 | 4 | | 1:4 |
| | 15 | 75 | | | | |
| | 10 | | | 5 | 1 | |
| | 25 | | | | | 5:1 |
| | | | 10:1 | | | |
| | | 80 | | | | 4:1 |
| | 20 | | | 5 | 3 | |
| | | 24 | 3:1 | | | |