

## Overall ratio "i," calculating

### Transmission ratio

Transmission ratio = No. of teeth driven gear : No. of teeth drive gear

Ratios	Formula
$i_G$ = gear ratio	$ZG_2 : ZG_1$
$i_A$ = axle ratio	$ZA_2 : ZA_1$
$i_{ov}$ = overall ratio	$i_G \times i_A$

### Example:

	6th gear	Final drive
Drive gear	$ZG_1 = 38$	$ZA_1 = 9$
Driven gear	$ZG_2 = 26$	$ZA_2 = 37$

### Calculating:

$$i_G = 26 : 38 = 0.684$$

$$i_A = 37 : 9 = 4.111$$

$$i_{ov} = (26 : 38) \times (37 : 9) = 0.684 \times 4.111 = 2.813$$