

**Gear ratios**

Axle teeth	Teeth on engine cog				
	9	10	11	12	13
99	11.00	9.90	9.00	8.25	7.62
98	10.89	9.80	8.91	8.17	7.54
97	10.78	9.70	8.82	8.08	7.46
96	10.67	9.60	8.73	8.00	7.38
95	10.56	9.50	8.64	7.92	7.31
94	10.44	9.40	8.55	7.83	7.23
93	10.33	9.30	8.45	7.75	7.15
92	10.22	9.20	8.36	7.67	7.08
91	10.11	9.10	8.27	7.58	7.00
90	10.00	9.00	8.18	7.50	6.92
89	9.89	8.90	8.09	7.42	6.85
88	9.78	8.80	8.00	7.33	6.77
87	9.67	8.70	7.91	7.25	6.69
86	9.56	8.60	7.82	7.17	6.62
85	9.44	8.50	7.73	7.08	6.54
84	9.33	8.40	7.64	7.00	6.46
83	9.22	8.30	7.55	6.92	6.38
82	9.11	8.20	7.45	6.83	6.31
81	9.00	8.10	7.36	6.75	6.23
80	8.89	8.00	7.27	6.67	6.15
79	8.78	7.90	7.18	6.58	6.08
78	8.67	7.80	7.09	6.50	6.00
77	8.56	7.70	7.00	6.42	5.92
76	8.44	7.60	6.91	6.33	5.85
75	8.33	7.50	6.82	6.25	5.77
74	8.22	7.40	6.73	6.17	5.69
73	8.11	7.30	6.64	6.08	5.62
72	8.00	7.20	6.55	6.00	5.54
71	7.89	7.10	6.45	5.92	5.46
70	7.78	7.00	6.36	5.83	5.38

**How to calculate your speed in MPH**

Rear tyre  

$$\frac{\text{RPM} \times 60 \times \text{circumference (in inches)}}{\text{Ratio} \times 63,360 \text{ (inches in mile)}} = \text{Speed in MPH}$$

**How to calculate your speed in KPH**

Rear tyre  

$$\frac{\text{RPM} \times 60 \times \text{circumference (in cm)}}{\text{Ratio} \times 100,000 \text{ (cm in km)}} = \text{Speed in KPH}$$

- 1 Mile = 63360 Inches      1 km = 1000000 mm
- 1 Mile = 5280 Feet      1 km = 100000 cm
- 1 Mile = 1760 Yards      1 km = 1000 Metres
- 1 Inch = 2.54 cm      1 cm = 0.3937 inches
- 1 Foot = 30.48 cm      1 Metre = 39.37 Inches
- 1 Mile = 160934 cm      1 km = 3280 Feet
- 1 Mile = 1609 Metres      1 km = 1093 Yards
- 1 Mile = 1.6 km      1 km = 0.621 Miles

Use a bent paper clip to  
 remove battery.  
 Push under battery.  
 Twist and pull to remove.

