

9. We know that 1 mile = 5280 feet, and we know that 1 foot = 12 inches, so that

1 mile = 5280 feet (12 inch / feet) or, completing the multiplication,

1 mile = 63360 inch

We also know that

1 inch = 2.54 centimeters, so if we multiply the answer above by unity in the form (2.54 cm / inch) we get

1 mile = 63360 inch (2.54 cm / inch)

1 mile = 160934 cm

We know that 1 meter = 100 cm which means that 1 mile = 1609.34 meter.

(We moved the decimal point two places to the left)

Finally, 1 kilometer = 1000 meter, so we obtain

1 mile = 1.60934 km