

Notes and Practice: Converting Between Units

Example Problem: A car is traveling with a speed of 55mph. What is its speed in m/s?

Why does this method work?

Some basic conversions:

$1\text{m/s} = 2.24\text{mph}$

$1\text{ foot} = 0.305\text{m}$

$1\text{km} = 0.62\text{miles}$

$1\text{m} = 100\text{cm}$

$1\text{ inch} = 2.54\text{cm}$

$1\text{km} = 1,000\text{m}$

$1\text{gallon} = 128\text{ fluid ounces}$

$1\text{ gallon} = 4\text{ quarts}$

$1\text{ mile} = 5280\text{ feet}$

1. 8 feet = _____ m
2. 15m = _____ feet
3. A 5km race is _____ miles long.
4. A 23.6 mile marathon is _____ km long
5. 16m/s = _____ mph
6. 16m/s = _____ mph

7. 1 foot = _____ cm = _____ m

8. 7 quarts = _____ gallons = _____ fluid ounces

9. 5 hours = _____ days = _____ weeks

10. 300 feet = _____ mile = _____ km = _____ m

11. 5m = _____ cm = _____ inches = _____ feet