

Unit Conversion Problems (English-metric)

Use these conversion factors from English to metric units (or vice versa). You don't have to memorize them.

1.0 m = 3.28 ft = 39.4 inches
1.0 mile = 1610 m = 1.61 km
1.0 N = 0.225 lb
1.0 mile = 5280 ft

2.54 cm = 1.0 inches
1.0 acre = 4047 m²
1.0 horsepower = 746 Watts
1.0 hour = 3600 seconds

1.0 psi (lb/inch²) = 6895 Pascals (Pa)
1.0 calorie = 4.184 Joules
1.0 gallon = 3.785 liters

Now convert the following.

1. 76.9 feet = _____m

76.9 feet = 23.4 m

2. 37.5 cm = _____inches

37.5 cm = 14.8 inches

3. 950 Joules = _____calories

950 Joules = 227 calories

4. 16.5 feet = _____cm

16.5 feet = 503 cm

5. 15.0 psi = _____Pa

15.0 psi = 103421 Pa = 103000 Pa

6. 14700 lb = _____N

14700 lb = 65389 N = 65400 N

7. 65 miles/hour = _____ft/sec

65 miles/hour = 95 ft/sec

8. 85 miles/hour = _____m/sec

85 miles/hour = 38 m/sec

9. 225 horsepower = _____Watts

225 hp = 167850 W = 168000 W

10. 2.25 liters = _____gallons

2.25 liters = 0.594 gallons

11. 24.0 hours = _____seconds

24.0 hours = 86400 seconds

12. 75300 m² = _____acres

75300 m² = 18.6 acres

13. 1110 ft/sec = _____km/hr

1110 ft/sec = 1218 km/hr = 1220 km/hr

14. 175 lb = _____N

175 lb = 778 N

15. 18.0 miles/gallon = _____km/liter

18.0 miles/gallon = 7.65 km/liter

16. 65.3 m/s = _____miles/hour

65.3 m/s = 146 miles/hour

17. 2000. calories = _____Joules

2000. calories = 8368 Joules

18. 555 N = _____lb

555 N = 125 lb

19. 3.57 acres = _____ft²

3.57 acres = 155509 ft² = 156000 ft²

20. 100. Watts = _____horsepower

100. Watts = 0.134 horsepower