

Dimensional Analysis

Instructions: Using the equivalencies given, convert to the units requested.

Equivalencies			
60 seconds = 1 minute	365.242 days = 1 year	5,280 feet = 1 mile	100 centi = 1 unit
60 minutes = 1 hour	12 inches = 1 foot	1 inch = 2.54 cm	1,000 milli = 1 unit
24 hours = 1 day	3 feet = 1 yard	1 kilo = 1,000 units	10 ⁹ nano = 1 unit

1. 5 minutes = _____ s
2. 2.7 minutes = _____ s
3. 423 s = _____ minutes

4. 200 cm = _____ m
5. 4,123 cm = _____ m
6. 5 inches = _____ cm

7. 84 inches = _____ m
8. 34 ft = _____ m
9. 10 yards = _____ m

10. 1 mile = _____ km
11. 1 year = _____ s
12. 134 minutes = _____ hr and _____ min

13. 856 seconds = _____ min and _____ s
14. 1 hr and 23 min = _____ min
15. 8,923 s = _____ hr, _____ min, and _____ s

16. 0.5832 miles = _____ ft and _____ inches
17. 230 mm = _____ m
18. 345nm = _____ mm

19. 1,234 miles/hr = _____ miles/min
20. 0.56 m/s = _____ cm/s
21. 3 km/sec = _____ m/s

22. 4.56 km/hr = _____ m/s
23. 34.6 m/s = _____ km/hr
24. 60 miles/hr = _____ ft/s

25. 23.56 ft/s = _____ miles/hr
26. 60 miles/hr = _____ ft/year
27. 1 km/hr = _____ m/s