079 Math Practice

Changing Linear Measurements (Imperial System)

Multiply or divide when changing to other units of length. When you change from a large unit of length to a smaller unit, you multiply by the conversion factor. When you change from a small unit of length to a larger unit, you divide by the conversion factor.

Unit of length		Conversion factor
1 foot	=	12 inches
1 yard	=	36 inches
1 yard	=	3 feet
1 mile	=	5,280 feet
1 mile	=	1,760 yards

4 yards = ? inches

Large to Small —
Multiply by the conversion factor.

1 yard = 36 inches
36 x 4 = 144
4 yards = 144 inches

Fill-in the missing numbers.

1. 72 inches = _____ feet
2. 3 miles = _____ yards
3. 7 feet = _____ inches
4. 1 mile = _____ inches
5. 147 feet = _____ yards
6. 4 miles = _____ feet
7. 48 inches = _____ feet
8. 10,560 feet = _____ miles
9. 288 inches = _____ yards
10. 23 feet = _____ inches
11. 5 feet = _____ inches
12. 9 yards = _____ feet
13. 14 feet = _____ inches
14. 156 inches = _____ feet
15. 17,600 yards = _____ miles
16. 18 feet = _____ inches

Science students should realize that the metric system (SI system) is used in scientific research as well as in almost every other country around the world. This worksheet uses the Imperial System which has traditionally been used in the United States. The SI system makes conversions simple when compared to the problems presented here (using the Imperial System). Familiarity with converting one unit of measure into another is a useful skill – whether using the SI system or the Imperial system.

080 Math Practice

Adding and Subtracting Linear Measurements (Imperial System)

When you add or subtract measurements, you can only combine units that are the same. You can add feet to feet and inches to inches, but not inches to feet. Sometimes you have to change one unit to another.

12 inches = 1 foot **3 feet = 1 yard**

Example: Find the answers.

2 yards	1 foot	8 inches
+ 1 yard	1 foot	7 inches
3 yards	2 feet	15 inches

or

3 yards 3 feet 3 inches
(or 4 yards 3 inches)

	1	20
2 yards	~~2~~ feet	~~8~~ inches
– 1 yard	1 foot	9 inches
1 yard	0 feet	11 inches

or

1 yard 11 inches

Find the answer to these problems.

1.

2 feet	8 inches
+ 1 foot	2 inches

2.

6 yards	2 feet	3 inches
– 2 yards	1 foot	10 inches

3.

3 yards	1 foot	8 inches
+ 2 yards	1 foot	7 inches

4.

7 feet	3 inches
+ 9 feet	8 inches

5.

4 yards	2 feet	5 inches
– 1 yard	2 feet	7 inches

6.

4 yards	8 inches
– 2 yards	11 inches

7.

8 yards		10 inches
+ 3 yards	2 feet	7 inches

8.

2 yards		9 inches
– 1 yard	2 feet	6 inches

This worksheet uses the Imperial System which has traditionally been used in the United States. The SI system makes adding and subtracting linear measurements much simpler.