LESSON MAKER PRO

Unit Switch Quest

Change inches, feet, and yards with confidence.

GRADE 4 · 4.MG.1.d.i

4.MG.1.d.i "Given the equivalent measure of one unit, solve problems, including those in context, by determining the equivalent measures within the U.S. Customary system for: length (inches and feet, feet and yards, inches and yards);"

NAME _____ DATE _____

SWITCHING LENGTH UNITS

Use these facts: 1 foot = 12 inches and 1 yard = 3 feet. One yard also equals 36 inches. Multiply when you change to a smaller unit, and divide when you change to a larger unit.

WORKED EXAMPLE

How many inches are in 5 feet?

1. 1 foot = 12 inches.
2. Multiply 5 × 12.
3. 5 × 12 = 60.

Answer: 60 inches

PRACTICE 6 problems

1 How many inches are in 8 feet?

ANSWER _____

2 How many feet are in 72 inches?

ANSWER _____

3 How many feet are in 3 yards?

ANSWER _____

4 How many yards are in 24 feet?

ANSWER _____

5 How many inches are in 2 yards?

ANSWER _____

6 How many yards are in 108 inches?

ANSWER _____

APPLY IT Show your work

1 Amir is making a paper chain for the school talent show. He has 11 feet of blue paper strips. How many inches of blue paper strips does he have?

WORK SPACE

ANSWER _____

2 Lena's robot course is 18 feet long. How many yards long is the course?

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a mini-golf camp, a lane has a 2-yard straight section and a 9-foot curved section. How many inches long is the whole lane?

WORK SPACE AND ANSWER

ANSWER KEY

Unit Switch Quest

GRADE 4 · 4.MG.1.d.i

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	How many inches are in 8 feet?	**96 inches**
2	How many feet are in 72 inches?	**6 feet**
3	How many feet are in 3 yards?	**9 feet**
4	How many yards are in 24 feet?	**8 yards**
5	How many inches are in 2 yards?	**72 inches**
6	How many yards are in 108 inches?	**3 yards**

PART 2 · APPLY IT

1. **132 inches** Since 1 foot equals 12 inches, multiply 11 × 12. Amir has 132 inches of blue paper strips.
2. **6 yards** Since 1 yard equals 3 feet, divide 18 by 3. The robot course is 6 yards long.

CHALLENGE

180 inches

Accept correct numerical answers with the matching unit written in words or abbreviations. For the challenge, accept work that changes each section to inches before adding, or that first changes the total length to yards.