LESSON MAKER PRO

# Measure the Marks

*Read measurement scales and change to smaller units.*

**GRADE 4 · 4.M.A.22.c**

**4.M.A.22.c** "Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale."

NAME _____ DATE _____

## READ, THEN CONVERT

On a number line, equal spaces show equal amounts. Read the scale to find a point's value. To change a larger unit to a smaller unit, multiply by the number of smaller units in one larger unit.

### WORKED EXAMPLE

The number line shows yards. How many feet does point A show?

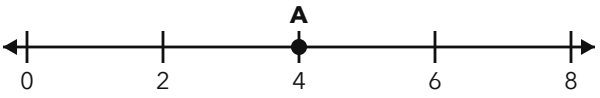



1. Point A is at 5 yards.
2. 1 yard = 3 feet.
3. 5 × 3 = 15.

**Answer: 15 feet**

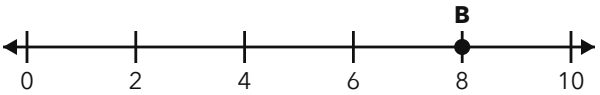
## PRACTICE 6 problems

**1** The number line shows feet. How many inches does point A show? Use 1 foot = 12 inches.



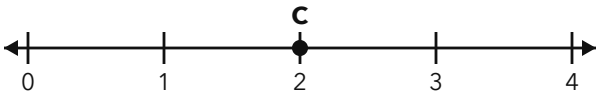

**ANSWER** _____

**2** The number line shows minutes. How many seconds does point B show? Use 1 minute = 60 seconds.



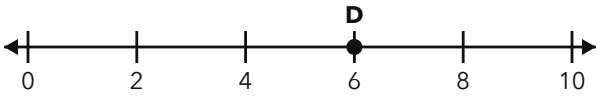

**ANSWER** _____

**3** The number line shows pounds. How many ounces does point C show? Use 1 pound = 16 ounces.




**ANSWER** _____

**4** The number line shows meters. How many centimeters does point D show? Use 1 meter = 100 centimeters.




**ANSWER** _____

**5** The number line shows feet. Mark point E at 7 feet. Then write that length in inches. Use 1 foot = 12 inches.




**ANSWER** _____

_____

**6** The number line shows minutes. Mark point F at 9 minutes. Then write that time in seconds. Use 1 minute = 60 seconds.

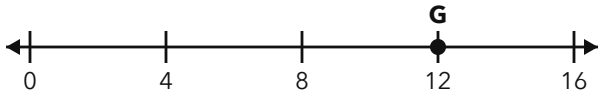



**ANSWER** _____

_____

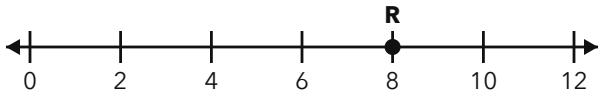
## APPLY IT Show your work

**1** Nia times a round of her favorite game. The number line shows minutes. Point G marks the end of the round. How many seconds did the round last? Use 1 minute = 60 seconds.




**ANSWER** _____

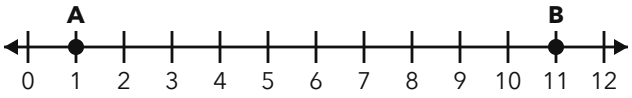
**2** Leo measures a ribbon for a school banner. The number line shows feet. Point R marks the ribbon's length. How many inches long is the ribbon? Use 1 foot = 12 inches.




**ANSWER** _____

## CHALLENGE One step up

The number line shows feet of rope. Points A and B mark the ends of one piece. How many inches long is the piece? Explain with a subtraction and a multiplication. Use 1 foot = 12 inches.




WORK SPACE AND ANSWER

**ANSWER KEY** # Measure the Marks

**GRADE 4 · 4.M.A.22.c**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | The number line shows feet. How many inches does point A show? Use 1 foot = 12 inches. | **48 inches** |
| 2 | The number line shows minutes. How many seconds does point B show? Use 1 minute = 60 seconds. | **480 seconds** |
| 3 | The number line shows pounds. How many ounces does point C show? Use 1 pound = 16 ounces. | **32 ounces** |
| 4 | The number line shows meters. How many centimeters does point D show? Use 1 meter = 100 centimeters. | **600 centimeters** |
| 5 | The number line shows feet. Mark point E at 7 feet. Then write that length in inches. Use 1 foot = 12 inches. | **Point E at 7 feet; 84 inches** |
| 6 | The number line shows minutes. Mark point F at 9 minutes. Then write that time in seconds. Use 1 minute = 60 seconds. | **Point F at 9 minutes; 540 seconds** |

## PART 2 · APPLY IT

1. **720 seconds** Point G is at 12 minutes. Multiply 12 × 60 to get 720 seconds.
2. **96 inches** Point R is at 8 feet. Multiply 8 × 12 to get 96 inches.

## CHALLENGE

**11 - 1 = 10 feet, and 10 × 12 = 120 inches. The piece is 120 inches long.**

For marking problems, accept a clearly placed point at the correct tick. For the challenge, accept any equivalent subtraction and multiplication that give 120 inches.