Yard Line Sort

Compare lengths shown on inches number lines.

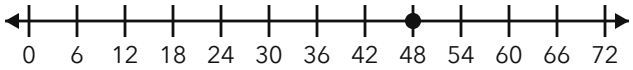
5.GM.3.3 "Apply the relationship between inches, feet, and yards to measure, convert, and compare objects to solve problems."

NAME _____ DATE _____

LONGER THAN A YARD

One yard is 36 inches. A point above 36 on an inches number line shows a length longer than one yard.

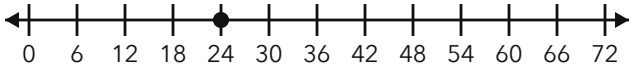
A 4-foot hose is 48 inches long, so it is longer than one yard.



SHORTER THAN A YARD

A point below 36 on an inches number line shows a length shorter than one yard. One foot is 12 inches.

A 2-foot shoelace is 24 inches long, so it is shorter than one yard.



1 SORT

8 items

Each number line shows inches, so circle LONGER or SHORTER for each point compared with one yard.

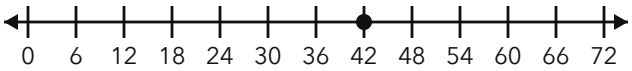
1. 

Figure 1 **LONGER** **SHORTER**

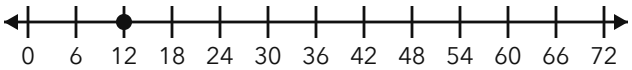
2. 

Figure 2 **LONGER** **SHORTER**

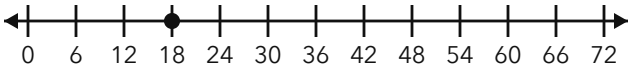
3. 

Figure 3 **LONGER** **SHORTER**

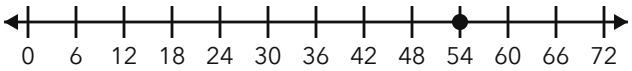
4. 

Figure 4 **LONGER** **SHORTER**

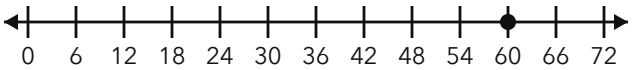
5. 

Figure 5 **LONGER** **SHORTER**

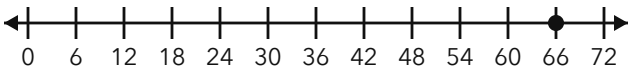
6. 

Figure 6 **LONGER** **SHORTER**

7.

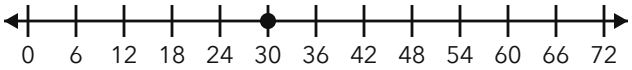


Figure 7

LONGER **SHORTER**

8.

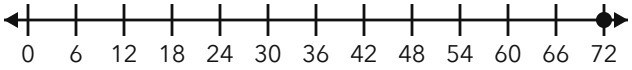


Figure 8

LONGER **SHORTER**

2 PROVE IT

Explain your thinking

Choose two figures and explain how you knew where each belongs.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Draw a new inches number line with one marked point for each category, and write each point's length.

LONGER

SHORTER

CHALLENGE

A board is 2 yards and 1 foot long. How many inches long is it? Draw a number line with a point at that length, then tell which category it belongs to.

ANSWER KEY

Yard Line Sort

GRADE 5 · 5.GM.3.3

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (numberline)	**LONGER**	42 inches is greater than 36 inches.
2	Figure 2 (numberline)	**SHORTER**	12 inches is less than 36 inches.
3	Figure 3 (numberline)	**SHORTER**	18 inches is less than 36 inches.
4	Figure 4 (numberline)	**LONGER**	54 inches is greater than 36 inches.
5	Figure 5 (numberline)	**LONGER**	60 inches is greater than 36 inches.
6	Figure 6 (numberline)	**LONGER**	66 inches is greater than 36 inches.
7	Figure 7 (numberline)	**SHORTER**	30 inches is less than 36 inches.
8	Figure 8 (numberline)	**LONGER**	72 inches is greater than 36 inches.

PART 2 · PROVE IT

Task: Choose two figures and explain how you knew where each belongs.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **LONGER**: Draw a number line from 0 to 72 inches and mark 63 inches.
- **SHORTER**: Draw a number line from 0 to 72 inches and mark 33 inches.

Challenge: The board is 72 + 12 = 84 inches long. Draw a number line from 0 to 96 inches and mark 84. It belongs in LONGER because 84 inches is greater than 36 inches.

For PROVE IT, look for two explanations that compare the marked lengths with 36 inches. For MAKE YOUR OWN, accept any two new points, one below 36 inches and one above 36 inches.