Lesson 15:

Represent data on a line plot.

CCSS Standard – 5.MD.B.2

FLUENCY (15-min)

Sprint: Interpret Division as a Fraction

SPRINT: Write a division expression as a fraction, whole number, or mixed number. (PAGE 129)

1.	$1 \div 8$	1/8
2.	$4 \div 4$	1
3.	$5 \div 4$	1 ¼

I don't expect you to finish. Do as many problems as you can. Go for YOUR personal best. Take your mark. Get set. Think!

FLUENCY (15-min)

Sprint: Interpret Division as a Fraction

Sprint A – Page 130

Sprint A

STOP!!

Underline the last problem that you did.

I am going to read the answers. If you got it right, call out "Yes!" If you made a mistake, circle the answer.

Count the number you got **correct** and write the number at the top of the page.

THIS WILL BE YOUR PERSONAL GOAL FOR SPRINT B

A

Number Correct: _____

Write the quotient for each expression. Use a whole number or mixed number when possible.

1.	$1 \div 2$	$\frac{1}{2}$
2.	$1 \div 3$	$\frac{1}{3}$
3.	$1 \div 8$	$\frac{1}{8}$
4.	$2 \div 2$	1
5.	$2 \div 3$	$\frac{2}{3}$
6.	$3 \div 3$	1
7.	$3 \div 4$	$\frac{3}{4}$
8.	$3 \div 10$	$\frac{3}{10}$
9.	$3 \div 5$	$\frac{3}{5}$
10.	$5 \div 5$	1
11.	$6 \div 5$	$1\frac{1}{5}$
12.	$7 \div 5$	$1\frac{2}{5}$
13.	$9 \div 5$	$1\frac{4}{5}$
14.	$2 \div 3$	$\frac{2}{3}$
15.	$4 \div 4$	1
16.	$5 \div 4$	$1\frac{1}{4}$
17.	$7 \div 4$	$1\frac{3}{4}$
18.	$4 \div 2$	2
19.	$5 \div 2$	$2\frac{1}{2}$
20.	$10 \div 5$	2
21.	$11 \div 5$	$2\frac{1}{5}$
22.	$13 \div 5$	$2\frac{3}{5}$

23.	$6 \div 2$	3
24.	$7 \div 2$	$3\frac{1}{2}$
25.	$8 \div 8$	1
26.	$9 \div 8$	$1\frac{1}{8}$
27.	$15 \div 8$	$1\frac{7}{8}$
28.	$8 \div 4$	2
29.	$11 \div 4$	$2\frac{3}{4}$
30.	$15 \div 2$	$7\frac{1}{2}$
31.	$24 \div 5$	$4\frac{4}{5}$
32.	$17 \div 4$	$4\frac{1}{4}$
33.	$20 \div 3$	$6\frac{2}{3}$
34.	$13 \div 6$	$2\frac{1}{6}$
35.	$30 \div 7$	$4\frac{2}{7}$
36.	$27 \div 8$	$3\frac{3}{8}$
37.	$49 \div 9$	$5\frac{4}{9}$
38.	$29 \div 6$	$4\frac{5}{6}$
39.	$47 \div 7$	$6\frac{5}{7}$
40.	$53 \div 8$	$6\frac{5}{8}$
41.	$67 \div 9$	$7\frac{4}{9}$
42.	$59 \div 6$	$9\frac{5}{6}$
43.	$63 \div 8$	$7\frac{7}{8}$
44.	$71 \div 9$	$7\frac{8}{9}$

FLUENCY (15-min) **Sprint: Equivalent Fractions**

Sprint A – Page 132
Take your mark. Get set. Improve!

Sprint B

STOP!!

Underline the last problem that you did.

I am going to read the answers. If you got it right, call out "Yes!" If you made a mistake, circle the answer.

Count the number you got **correct** and write the number at the top of the page.

Determine your improved score!

B

Number Correct: _____

Improvement: _____

Write the quotient for each expression. Use a whole number or mixed number when possible.

1.	$1 \div 3$	$\frac{1}{3}$
2.	$1 \div 4$	$\frac{1}{4}$
3.	$1 \div 10$	$\frac{1}{10}$
4.	$5 \div 5$	1
5.	$5 \div 6$	$\frac{5}{6}$
6.	$3 \div 3$	1
7.	$3 \div 7$	$\frac{3}{7}$
8.	$3 \div 10$	$\frac{3}{10}$
9.	$3 \div 4$	$\frac{3}{4}$
10.	$4 \div 4$	1
11.	$5 \div 4$	$1\frac{1}{4}$
12.	$2 \div 2$	1
13.	$3 \div 2$	$1\frac{1}{2}$
14.	$4 \div 5$	$\frac{4}{5}$
15.	$10 \div 10$	1
16.	$11 \div 10$	$1\frac{1}{10}$
17.	$13 \div 10$	$1\frac{3}{10}$
18.	$10 \div 5$	2
19.	$11 \div 5$	$2\frac{1}{5}$
20.	$13 \div 5$	$2\frac{3}{5}$
21.	$4 \div 2$	2
22.	$5 \div 2$	$2\frac{1}{2}$
23.	$15 \div 5$	3
24.	$16 \div 5$	$3\frac{1}{5}$
25.	$6 \div 6$	1
26.	$7 \div 6$	$1\frac{1}{6}$
27.	$11 \div 6$	$1\frac{5}{6}$
28.	$6 \div 3$	2
29.	$8 \div 3$	$2\frac{2}{3}$
30.	$13 \div 2$	$6\frac{1}{2}$
31.	$23 \div 5$	$4\frac{3}{5}$
32.	$15 \div 4$	$3\frac{3}{4}$
33.	$19 \div 4$	$4\frac{3}{4}$
34.	$19 \div 6$	$3\frac{1}{6}$
35.	$31 \div 7$	$4\frac{3}{7}$
36.	$37 \div 8$	$4\frac{5}{8}$
37.	$50 \div 9$	$5\frac{5}{9}$
38.	$17 \div 6$	$2\frac{5}{6}$
39.	$48 \div 7$	$6\frac{6}{7}$
40.	$51 \div 8$	$6\frac{3}{8}$
41.	$68 \div 9$	$7\frac{5}{9}$
42.	$53 \div 6$	$8\frac{5}{6}$
43.	$61 \div 8$	$7\frac{5}{8}$
44.	$70 \div 9$	$7\frac{7}{9}$

FLUENCY (15-min) **Whiteboard Exchange: Add Fractions**

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$$\frac{1}{2} + \frac{1}{4} =$$

Look at the fractional units.
*Do they have **LIKE units**?*

*No! Are the units **RELATED**?*

Yes! Which fraction can we RENAME so the fractional units, or denominators, are the same?

½

FLUENCY (15-min) **Whiteboard Exchange: Add Fractions**

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$$\frac{1}{6}+\frac{1}{3}=$$

Look at the fractional units.
*Do they have **LIKE units**?*

*No! Are the units **RELATED**?*

Yes! Which fraction can we RENAME so the fractional units, or denominators, are the same?

1/3

FLUENCY (15-min) **Whiteboard Exchange: Add Fractions**

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$$\frac{3}{4}+\frac{3}{8}=$$

Look at the fractional units.
*Do they have **LIKE units**?*

*No! Are the units **RELATED**?*

Yes! Which fraction can we RENAME so the fractional units, or denominators, are the same?

3/4

FLUENCY (15-min) **Whiteboard Exchange: Add Fractions**

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$$\frac{5}{9} + \frac{2}{3} =$$

Look at the fractional units.
*Do they have **LIKE units**?*

*No! Are the units **RELATED**?*

Yes! Which fraction can we RENAME so the fractional units, or denominators, are the same?

2/3

LAUNCH (10-min) **Discuss how to use data in a calendar to answer questions.**

LEARN BOOK: PAGE 133 & 134

SUN	MON	TUE	WED	THU	FRI	SAT
		1 $2\frac{5}{8}$ miles	2 $2\frac{7}{8}$ miles	3 $2\frac{1}{2}$ miles	4 $1\frac{3}{4}$ miles	5 $2\frac{3}{4}$ miles
6 $1\frac{1}{2}$ miles	7 $2\frac{1}{2}$ miles	8 $2\frac{3}{4}$ miles	9 $1\frac{7}{8}$ miles	10 $2\frac{5}{8}$ miles	11 $1\frac{1}{8}$ miles	12 $1\frac{1}{4}$ miles
13 $2\frac{3}{4}$ miles	14 $1\frac{3}{8}$ miles	15 2 miles	16 $2\frac{1}{2}$ miles	17 $2\frac{3}{4}$ miles	18 $2\frac{7}{8}$ miles	19 $2\frac{1}{2}$ miles
20 $1\frac{1}{2}$ miles	21 $1\frac{1}{8}$ miles	22 $1\frac{1}{4}$ miles	23 $2\frac{5}{8}$ miles	24 $2\frac{7}{8}$ miles	25 2 miles	26 $2\frac{1}{2}$ miles
27 $2\frac{1}{2}$ miles	28 $2\frac{3}{4}$ miles	29 $1\frac{7}{8}$ miles	30 $2\frac{1}{8}$ miles			

What do you notice about the data?

- *The distances are in miles.*
- *Most distances are mixed numbers*
- *The fractional units are halves, fourths, and eighths.*

a. *How many miles did Miss Song walk on the first Monday of the month?*

$2\frac{1}{2}$ miles

b. *What is the longest distance Miss Song walked?*

$2\frac{7}{8}$ miles

c. *What is the shortest distance Miss Song walked?*

$1\frac{1}{8}$ miles

d. *On which day did Miss Song walk 1 ¾ miles?*

Friday the 4th

LAUNCH (10-min) **Discuss how to use data in a calendar to answer questions.**

LEARN BOOK: PAGE 133 & 134

SUN	MON	TUE	WED	THU	FRI	SAT
		1 $2\frac{5}{8}$ miles	2 $2\frac{7}{8}$ miles	3 $2\frac{1}{2}$ miles	4 $1\frac{3}{4}$ miles	5 $2\frac{3}{4}$ miles
6 $1\frac{1}{2}$ miles	7 $2\frac{1}{2}$ miles	8 $2\frac{3}{4}$ miles	9 $1\frac{7}{8}$ miles	10 $2\frac{5}{8}$ miles	11 $1\frac{1}{8}$ miles	12 $1\frac{1}{4}$ miles
13 $2\frac{3}{4}$ miles	14 $1\frac{3}{8}$ miles	15 2 miles	16 $2\frac{1}{2}$ miles	17 $2\frac{3}{4}$ miles	18 $2\frac{7}{8}$ miles	19 $2\frac{1}{2}$ miles
20 $1\frac{1}{2}$ miles	21 $1\frac{1}{8}$ miles	22 $1\frac{1}{4}$ miles	23 $2\frac{5}{8}$ miles	24 $2\frac{7}{8}$ miles	25 2 miles	26 $2\frac{1}{2}$ miles
27 $2\frac{1}{2}$ miles	28 $2\frac{3}{4}$ miles	29 $1\frac{7}{8}$ miles	30 $2\frac{1}{8}$ miles			

e. *How many days did Miss Song walk AT LEAST 1 ¾ miles?*

23 days

f. *Did Miss Song usually walk more or less than 1 ¾ miles?*

more

Were you able to find some answers more quickly than other? Which ones? Discuss.

Today, we will create line plots to represent data.

LEARN (25-min) **Create a line plot.**

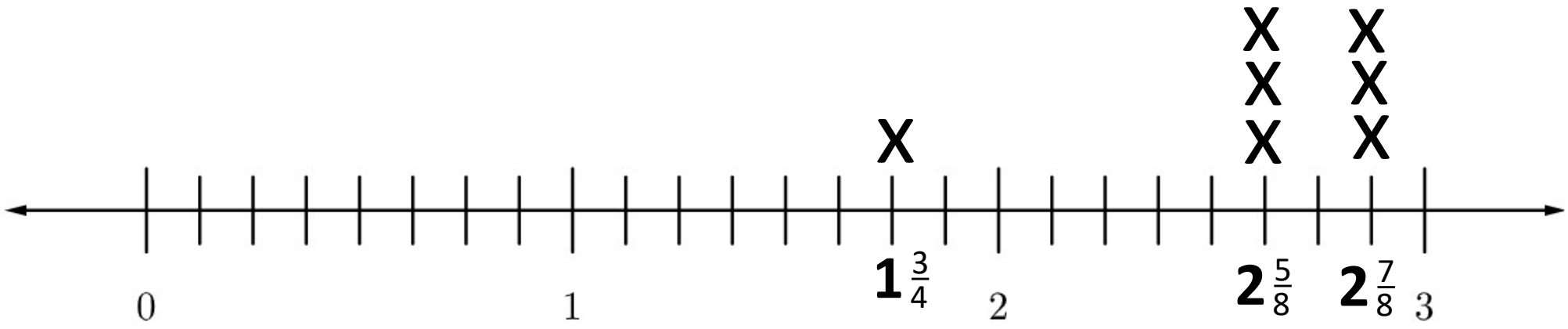
LEARN BOOK PAGE 134. ***(Interactive number line)***

Use the data presented in the calendar to create a line plot.

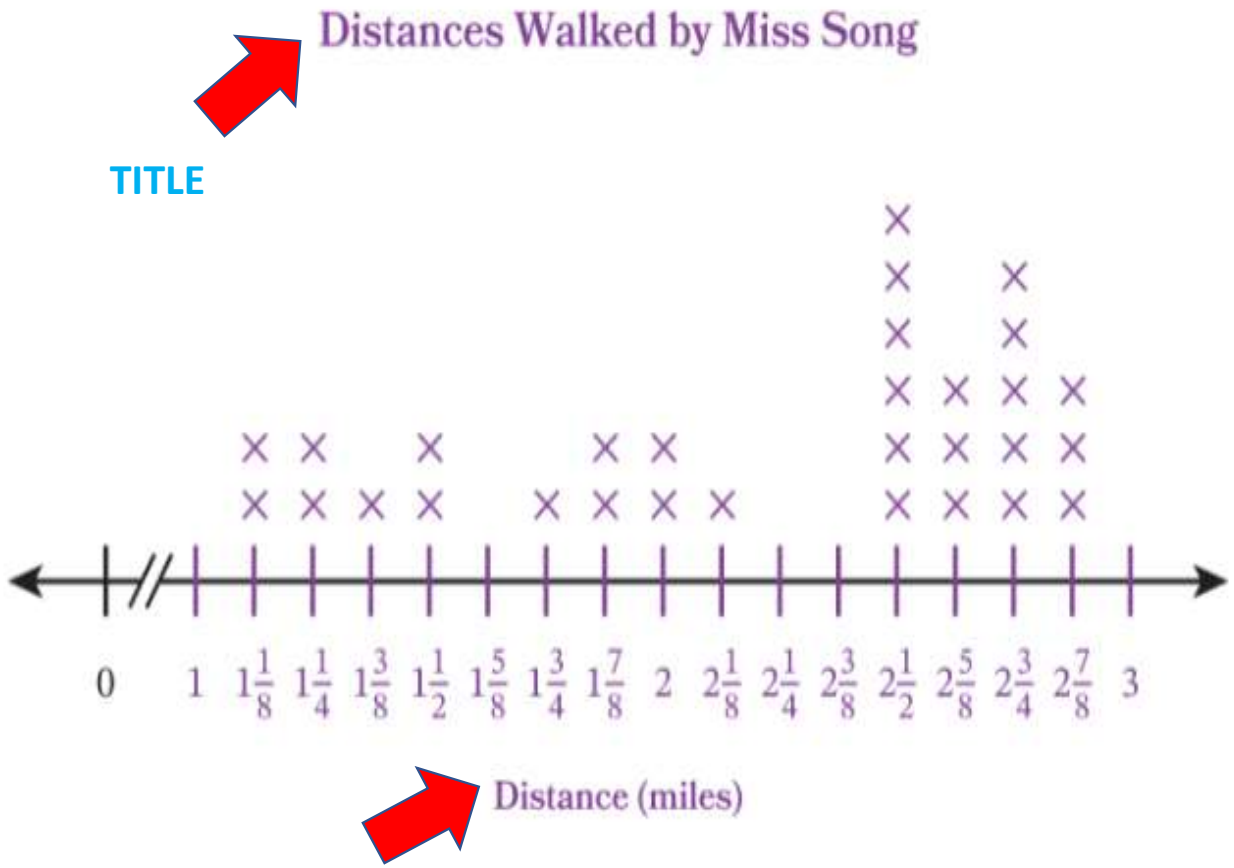
First, let's discuss how the number line should look. What interval length (or unit) should we use? Why?

5-minutes: Work with a partner to plot all of Miss Song's distances.

SUN	MON	TUE	WED	THU	FRI	SAT
		1 $2\frac{5}{8}$ miles	2 $2\frac{7}{8}$ miles	3 $2\frac{1}{2}$ miles	4 $1\frac{3}{4}$ miles	5 $2\frac{3}{4}$ miles
6 $1\frac{1}{2}$ miles	7 $2\frac{1}{2}$ miles	8 $2\frac{3}{4}$ miles	9 $1\frac{7}{8}$ miles	10 $2\frac{5}{8}$ miles	11 $1\frac{1}{8}$ miles	12 $1\frac{1}{4}$ miles
13 $2\frac{3}{4}$ miles	14 $1\frac{3}{8}$ miles	15 2 miles	16 $2\frac{1}{2}$ miles	17 $2\frac{3}{4}$ miles	18 $2\frac{7}{8}$ miles	19 $2\frac{1}{2}$ miles
20 $1\frac{1}{2}$ miles	21 $1\frac{1}{8}$ miles	22 $1\frac{1}{4}$ miles	23 $2\frac{5}{8}$ miles	24 $2\frac{7}{8}$ miles	25 2 miles	26 $2\frac{1}{2}$ miles
27 $2\frac{1}{2}$ miles	28 $2\frac{3}{4}$ miles	29 $1\frac{7}{8}$ miles	30 $2\frac{1}{8}$ miles			



LEARN (25-min) **Create a line plot.**



TITLE

Must include information about what the numbers mean!

Does your line plot match this one?

h. *What is the most frequent distance Miss Song walked?*

$2\frac{1}{2}$ miles

i. *How many miles did Miss Song walk on the third Saturday of the month?*

$2\frac{1}{2}$ miles

j. *What is the difference, in miles, between the longest and shortest distance Miss Song walked?*

$1\frac{6}{8}$ miles

k. *How many days did Miss Song walk less than 2 miles*

10 days

LAND (10-min)

Exit Ticket

15

Eddie tracks how far he walks each day for 10 days. The distances shown are in miles.

Day	1	2	3	4	5	6	7	8	9	10
Distance (miles)	$1\frac{1}{4}$	$\frac{1}{2}$	1	$2\frac{3}{8}$	$1\frac{1}{4}$	$2\frac{1}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$\frac{7}{8}$

1. Create a line plot for the data shown in the table. Title and label the line plot. Then plot the data.

2. Eddie says he usually walks at least 1 mile each day. Is that a correct statement? Why?

Exit Ticket – PAGE 137

Small Group Time:
Problem Set Page 135 -136

Homework:
Page 101 APPLY BOOK