



# TABE Math-E

## PAXEN

### Unit-4 Fractions

#### Lesson 29

#### Compare Fractions

Revised: October 16, 2023

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Some graphics may not have copied well during the scan process.

# Math-E - Lesson 29 – Compare Fractions

## Lesson 29

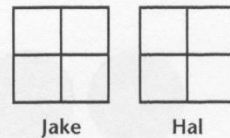
## Compare Fractions

3.NF.3.d – High

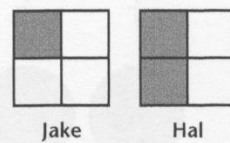
You can compare fractions in different ways. One way is to draw models of the fractions.

**Example** Jake mowed  $\frac{1}{4}$  of the lawn. Hal mowed  $\frac{2}{4}$  of the lawn. Who mowed more of the lawn?

1) Draw 2 squares to represent the lawn. Divide each square into 4 equal parts. Make the squares the same size so your comparisons are correct.



2) Jake mowed  $\frac{1}{4}$  of the lawn. Shade  $\frac{1}{4}$  of Jake's square. Shade  $\frac{2}{4}$  of Hal's square.



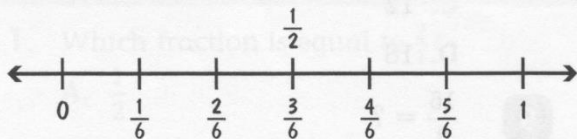
3) Compare the two shaded areas. Which is larger?

$\frac{2}{4}$  is greater than  $\frac{1}{4}$ .

$$\frac{2}{4} > \frac{1}{4}$$

Hal mowed more of the lawn.

Another way is to use a number line. Numbers farther to the right on a number line are greater than numbers to their left on the number line.

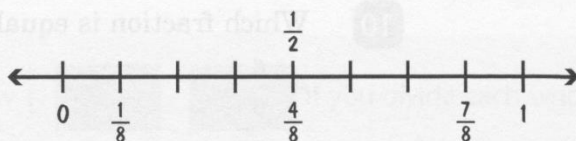


$\frac{3}{6}$  is to the right of  $\frac{1}{6}$ , so  $\frac{3}{6} > \frac{1}{6}$ .

$\frac{3}{6}$  is to the left of  $\frac{5}{6}$ , so  $\frac{3}{6} < \frac{5}{6}$ .

### Test Example

1. Look at the fractions on the number line. Which statement is true?



- A.  $\frac{8}{8}$  is greater than 1.      B.  $\frac{1}{8}$  is greater than  $\frac{2}{8}$ .
- C.  $\frac{6}{8}$  is less than  $\frac{7}{8}$ .      D.  $\frac{6}{8}$  is less than  $\frac{4}{8}$ .

1. C On the number line, fractions closer to 1 are greater than fractions closer to 0.  $\frac{7}{8}$  is closer to 1 than  $\frac{6}{8}$ , so  $\frac{6}{8}$  is less than  $\frac{7}{8}$ .

#### Hint

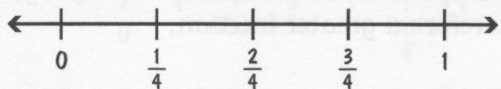
You can use 0,  $\frac{1}{2}$ , and 1 as benchmarks for comparing fractions.  $\frac{4}{8} = \frac{1}{2}$

# Math-E - Lesson 29 – Compare Fractions

## Practice

Read each question. Select the correct answer.

- 1 Which two fractions are greater than  $\frac{1}{2}$ ?



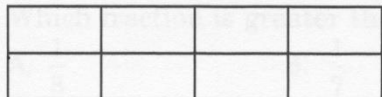
- A.  $\frac{1}{4}$                       B.  $\frac{2}{4}$   
 C.  $\frac{3}{4}$                       D.  $\frac{4}{4}$

- 2 Which fraction is closest to 0?



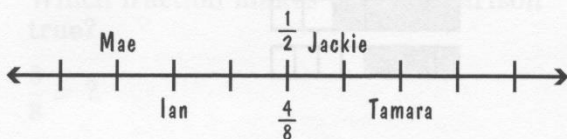
- A.  $\frac{1}{5}$                       B.  $\frac{2}{5}$   
 C.  $\frac{3}{5}$                       D.  $\frac{4}{5}$

- 3 Which fraction is less than  $\frac{1}{2}$ ?



- A.  $\frac{2}{8}$                       B.  $\frac{4}{8}$   
 C.  $\frac{5}{8}$                       D.  $\frac{7}{8}$

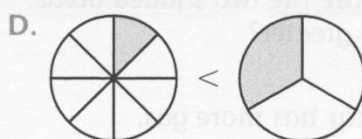
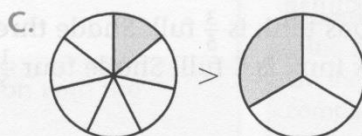
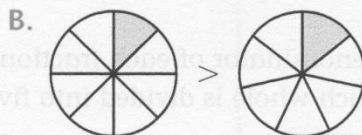
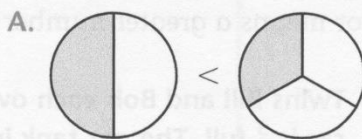
- 4 Four friends are reading a book for a discussion group. The number line shows how much of the book each reader has completed.



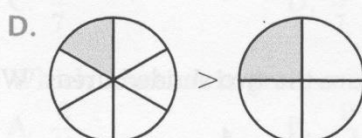
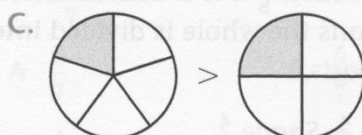
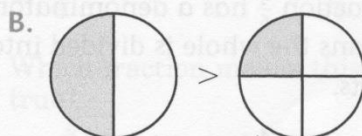
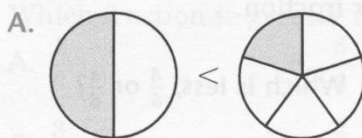
Who is closest to completing the book?

- A. Tamara                      B. Mae  
 C. Ian                          D. Jackie

- 5 Which comparison is true?



- 6 Which comparison is true?



# Math-E - Lesson 29 – Compare Fractions

## Lesson 29

## Compare Fractions

(3.NF.3.d)

1. C, D.  $\frac{1}{2} = \frac{2}{4}$ ,  $\frac{4}{4} = 1$ ;  $\frac{3}{4}$  and  $\frac{4}{4}$  are to the right of  $\frac{2}{4}$ .
2. A. The fraction closest to 0 is  $\frac{1}{5}$ .
3. A.  $\frac{1}{2}$  is the same as  $\frac{4}{8}$ .  $\frac{2}{8}$  is less than  $\frac{4}{8}$ .
4. A. Tamara is closest to 1. 1 represents the whole book.
5. D. The models show that  $\frac{1}{8}$  is less than  $\frac{1}{3}$ .
6. B. The models show that  $\frac{1}{2}$  is greater than  $\frac{1}{4}$ .

# Math-E - Lesson 29 – Compare Fractions

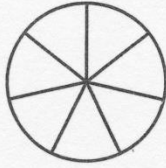
## Practice 29

## Compare Fractions

3.NF.3.d – High

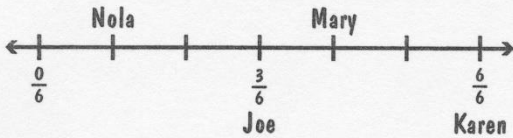
- 1 Which symbol correctly compares the fractions?

$$\frac{5}{7} \square \frac{3}{7}$$



- A.  $>$                       B.  $<$   
C.  $=$                         D.  $\leq$

Use the number line for question 2.



### 2 Part A

Members of a running club warm up for a race. The number line shows the fraction of a mile that each member jogs for a warm-up. Which statement is true?

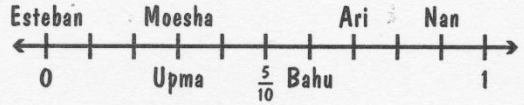
- A. Joe jogs a shorter distance than Nola.  
B. Nola jogs a greater distance than Karen.  
C. Karen jogs the entire mile.  
D. Mary jogs the same distance as Joe.

### Part B

Which of these correctly compares the distances that Karen and Nola each jog?

- A.  $\frac{1}{6} = \frac{6}{6}$                       B.  $\frac{1}{6} > \frac{6}{6}$   
C.  $\frac{6}{6} < \frac{1}{6}$                         D.  $\frac{6}{6} > \frac{1}{6}$

Use the number line to answer question 3.



### 3 Part A

Several coworkers set a goal to exercise one hour each day. The number line shows how much time each coworker exercises the first day. Which statement is true?

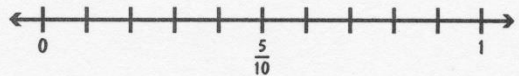
- A. Ari exercises for less time than Upma.  
B. Moesha exercises for more time than Bahu.  
C. Nan exercises for less time than Upma.  
D. Esteban does not exercise on the first day.

### Part B

Which two coworkers exercise for the same amount of time?

- A. Moesha and Ari  
B. Upma and Moesha  
C. Ari and Nan  
D. Bahu and Upma

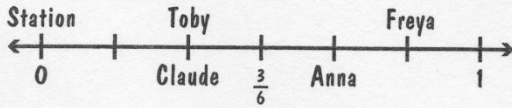
- 4 During a road trip, Jake drives  $\frac{7}{10}$  of the total mileage. Neville drives  $\frac{3}{10}$  of the total mileage. Who drives more miles?



- A. Jake drives more miles than Neville.  
B. Neville drives more miles than Jake.  
C. Neville drives more than half the total mileage.  
D. Jake and Neville drive the same distance.

# Math-E - Lesson 29 – Compare Fractions

Use the number line for question 5.



**5 Part A**

Passengers board a regional rail at the station. The number line shows how much of the rail line the passengers travel. Who disembarks last?

- A. Toby
- B. Freya
- C. Claude
- D. Anna

**Part B**

Which two statements are true?

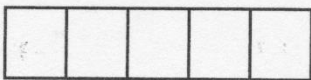
- A. Freya travels the entire line.
- B. Anna's ride is longer than Toby's ride.
- C. Claude travels more than half the length of the line.
- D. Freya's ride is shorter than Toby's ride.
- E. Toby and Claude ride the same distance.
- F. Anna travels less than half the length of the line.

**6** Which fraction is less than  $\frac{3}{7}$ ?



- A.  $\frac{2}{7}$
- B.  $\frac{3}{7}$
- C.  $\frac{4}{7}$
- D.  $\frac{5}{7}$

**7** Which fraction is closest to 1?



- A.  $\frac{4}{5}$
- B.  $\frac{3}{5}$
- C.  $\frac{1}{5}$
- D.  $\frac{0}{5}$

**8** Which comparison is true?

A.

B.

C.

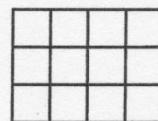
D.

**9** Carmen and Samina watch a movie. Carmen falls asleep after watching  $\frac{2}{4}$  of the movie. Samina falls asleep after watching  $\frac{3}{4}$  of the movie. Which statement is true?



- A. Samina watches less than half of the movie.
- B. Carmen watches less than half of the movie.
- C. Samina watches more of the movie than Carmen.
- D. Carmen and Samina watch the movie for the same amount of time.

**10** Which comparison is true?



- A.  $\frac{1}{2} > \frac{6}{12}$
- B.  $\frac{6}{12} < \frac{1}{2}$
- C.  $\frac{6}{12} = \frac{1}{2}$
- D.  $\frac{1}{2} < \frac{6}{12}$

# Math-E - Lesson 29 – Compare Fractions

## Practice 29

## Compare Fractions

pp. 64–65

(3.NF.3.d)

1. A.  $\frac{5}{7}$  is greater than  $\frac{3}{7}$ .
2. Part A: C.  $\frac{6}{6} = 1$ ; 1 represents all the annuals, so Karen plants all of her annuals.  
Part B: D.  $\frac{6}{6}$  is to the right of  $\frac{1}{6}$ , so  $\frac{6}{6} > \frac{1}{6}$ .
3. Part A: D. Esteban exercises  $\frac{0}{10}$  hour.  $\frac{0}{10} = 0$ , so Esteban does not exercise on the first day.

Part B: B. Moesha and Upma each exercise for  $\frac{3}{10}$  hour, so they exercise for the same amount of time.

4. A. On the number line,  $\frac{7}{10}$  is to the right of  $\frac{3}{10}$ , so Jake drives more miles.

5. Part A: B. The number line shows Freya traveling the farthest, so she disembarks last.

Part B: B, E. On the number line, Anna is to the right of Toby, so Anna's ride is longer. Toby and Claude ride the same distance because  $\frac{2}{6} = \frac{2}{6}$ .

6. A.  $\frac{2}{7}$  is less than  $\frac{3}{7}$ .

7. A. The fraction  $\frac{5}{5}$  represents 1. The fraction closest to 1 is  $\frac{4}{5}$ .

8. D. The models show that  $\frac{1}{5}$  is greater than  $\frac{1}{8}$ .