# 1 MGSE5.NF.1 (DOK 1)

Yolanda's hair ribbon is  $\frac{5}{6}$  of a foot long. The ribbon was too long, so she cut  $\frac{2}{3}$  of a foot off. How long is Yolanda's hair ribbon now?

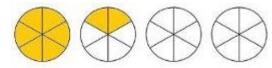
- A.  $\frac{1}{6}$  of a foot
- B.  $\frac{1}{3}$  of a foot
- C.  $\frac{3}{6}$  of a foot
- D.  $\frac{3}{3}$  of a foot

# 2 MGSE5.NF.1 (DOK 2)

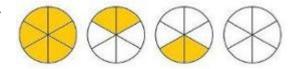
Miguel's mom made 4 taco pies for the family reunion.

The family ate  $2\frac{2}{6}$  of the pies the day of the reunion. How much pie is left over for Miguel and his family to eat the next night for dinner?

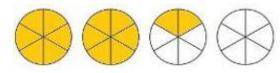
A.



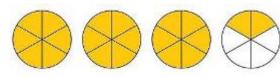
B.



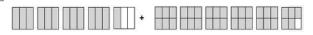
C.



D.



### 3 MGSE5.NF.1 (DOK 3)



Cyrus thinks the answer to the problem above is  $9\frac{7}{6}$ 

Jeff thinks the answer to the problem above is  $10\frac{3}{18}$ 

Bill thinks the answer to the problem above is  $\frac{65}{6}$  . Who is correct? Justify your answer.

# 4 MGSE5.NF.2 (DOK 2)

On Monday,  $\frac{2}{5}$  of the students at Jackie Robinson Elementary School went to the science lab. On

Tuesday,  $\overline{4}$  of the students went to the science lab. The rest of the students went to the science lab on Wednesday. What fraction of the students went to the science lab on Wednesday?

- A.  $\frac{7}{20}$
- B.  $\frac{3}{9}$
- C.  $\frac{13}{20}$
- D.  $\frac{6}{9}$

# 5 MGSE5.NF.2 (DOK 2)

Brandon, Felicity, and Josie are sharing a pie. Brandon  $\frac{1}{3}$  of the pie, Felicity ate  $\frac{1}{4}$  of the pie, and Josie ate  $\frac{1}{6}$  of the pie. What amount of pie did Brandon, Felicity, and Josie eat? Construct a model to justify your answer.

### 6 MGSE5.NF.2 (DOK 3)

Lisa and Pam went to the candy store. Lisa bought  $\frac{3}{4}$  of a bag of candy and Pam bought  $\frac{3}{8}$  of a bag of candy.

Mark and Jose' also went to the candy store. Mark  $\frac{2}{3}$  bought  $\frac{1}{6}$  of a bag of candy and Jose' bought  $\frac{1}{6}$  of a bag of candy. Which pair of friends was the closest to buying 1 whole bag of candy? Show your thinking in the space below.

# 7 MGSE5.NF.3 (DOK 2)

A carpenter used exactly 25 feet of wood to make 9 shelves of equal length. Between how many feet did each shelf measure? Justify your answer.

A. 
$$9 \div 25 = \frac{9}{25}$$

So each shelf measured between 0 and 1 foot.

B. 
$$25 \div 9 = \frac{25}{9} = 2\frac{7}{9}$$

So each shelf measured between 2 and 3 feet.

C. 
$$25 \div 9 = \frac{25}{9}$$

So each shelf measured between 25 and 26 feet.

D. 
$$25 \times 9 = 225$$

So each shelf measured between 200 and 300 feet.

# 8 MGSE5.NF.4.b (DOK 2)

Daniel's bedroom is 6 yards long and  $\frac{2}{3}$  yards wide. He wants to put carpet in his bedroom. How much carpet will Daniel need to buy in order to completely cover the floor of his bedroom?

- A.
- В.
- C.
- D.

# 9 MGSE5.NF.5.a (DOK 2)

Without solving the following problem, what can you determine about the missing number?

$$\frac{2}{3} \times \square = 1\frac{8}{9}$$

- A. The missing factor has to be less than 1.
- B. The missing factor has to be less than  $1\frac{9}{9}$ .
- C. The missing factor creates equivalent fractions.
- D. The missing factor has to be greater than 1.

# 10 MGSE5.NF.5b (DOK 3)

If you multiply  $\frac{4}{3}$  and any whole number greater than one, will the product will be greater than or less than  $\frac{4}{3}$ ? Justify your reasoning.

### 11 MGSE5.NF.6.b. (DOK 2)

Mrs. Lewis is making a cake for her daughter's birthday party. She realizes that only  $\frac{3}{4}$  of the friends are coming to the birthday party, so she needs to make a smaller cake. The original recipe calls for  $2\frac{1}{4}$  cups of flour. If she bakes a cake that is  $\frac{3}{4}$  smaller, how much flour will she need?

- A.  $\frac{3}{4}$  cups of flour
- $B. \quad \textbf{2}\frac{3}{4} \text{ cups of flour}$
- C.  $2\frac{3}{16}$  cups of flour
- $D. \quad \textbf{1} \frac{11}{16} \text{ cups of flour}$

# 12 MGSE5.NF.7.b (DOK 2)

Mr. Fresco wrote the following problem on the board for his students to solve:

"9 divided by  $\frac{1}{3} =$  "

Doug thinks the correct answer is 27 because

 $\frac{1}{3} \times 9 = 27$ , but Jessica thinks the correct answer is

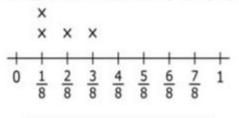
 $27 \times \frac{1}{3} = 9$ 27 because . Mr. Fresco is pleased to see the students debating the correct answer, but he wants the students to provide more evidence in their justifications. Choose the correct answer below.

- A. The correct answer is 27 because  $\frac{1}{3} \times 9 = 27$
- B. The correct answer is 27 because  $27 \times \frac{1}{3} = 9$
- C.  $\frac{1}{3}$  because  $\frac{1}{3} \times 9 = \frac{9}{27}$ , and when you simplify this fraction, it will be  $\frac{1}{3}$ .
- D. The correct answer is 3 because  $\frac{1}{3} \times 9 = \frac{9}{3}$ , and when you turn it into a mixed number, it will be 3 wholes.

# 13 MGSE5.MD.2 (DOK 2)

Judy conducted an experiment. She put a total of  $2\frac{1}{4}$  cups of water into an empty container. Then, Judy recorded the amount of water that evaporated from the container each day for four days. The line plot below shows the amount of water that evaporated from the container on each of the four days.

# Amount of Water That Evaporated Each Day (cups)



What mixed number represents the amount of water left in the container at the end of the fourth day?

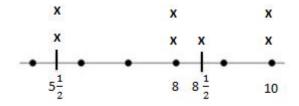
- A.  $1\frac{1}{2}$
- B. 118
- C. 13/8
- D.  $1\frac{1}{10}$

14 MGSE5.MD.2 (DOK 2)

Sam made a line plot to show how far he rode his bicycle each day last week. How many miles did Sam ride altogether last week?

#### Sam's Distance Each Day

(x = days)



Distance in miles

A. 
$$10\frac{1}{2}$$
 mi.

B. 32 mi.

C. 44 mi.

D.  $55\frac{1}{2}$  mix

### 15 MGSE5.MD.2 (DOK 3)

The National Honor Society (NHS) and Technology Club sold roses for Valentine's Day to raise money for new computers. Use the data below to construct two line plots, one representing the NHS data and one representing the Technology Club data. Based on the line plots, which club was more successful selling roses? Justify your answer.

#### NHS

Roses	9	10	11	12	13	14	15	16	17
Students	3	0	1	2	2	3	5	6	1

#### Technology Club

Roses	9	10	11	12	13	14	15	16	17
Students	2	3	4	5	4	4	3	0	0