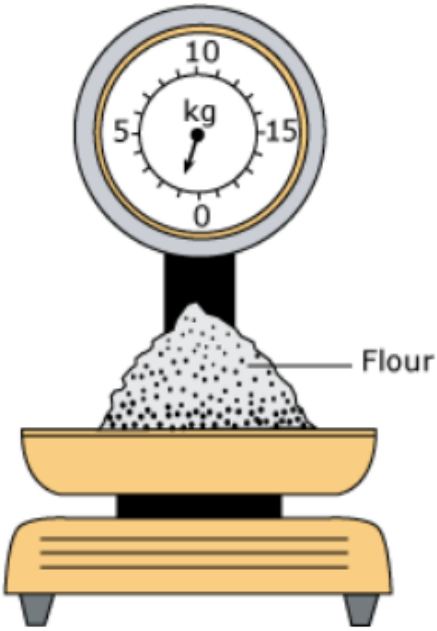
SAMPLES OF STANDARDS STUDENTS ARE LEARNING THIS NINE WEEKS:

4th Grade Math

STANDARDS: 4.MD.1, 4.MD.4, 4.MD.5, 4.MD.6, 4.NF.4b, 4.NF.4c, 4.NF.5

4.MD.1: Know relative sizes of measurement units including intervals of time, money, distances, liquid volumes, and masses of objects.

Tracy is measuring the mass of some flour on the scale shown below.



Which is the closest to the mass of the flour?

- 4 kg
- 3 kg
- 2 kg
- 1 kg

Use your centimeter ruler to measure the line segment. Which is closest to the length in centimeters of the line segment?

- 3.6
- 4.5
- 5.1
- 5.5

Millie took several trips during her summer vacation and recorded how long it took to get to each place in hours. Then, she converts the travel time to minutes.

Travel Time For Milli's Trips		
Milli's Trips	**Minutes**	**Hours**
Zoo	60	1
Beach	120	2
Mountains	?	3

How many minutes did it take Milli to travel to the mountains?

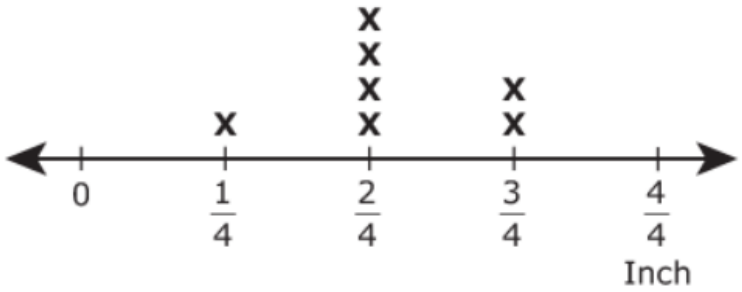
- 123 minutes
- 160 minutes
- 170 minutes
- 180 minutes

Kayla drank 6 glasses of water. Each glass contained 300 milliliters (mL). Andrew drank 2 liters of water. How many milliliters of water did Kayla and Andrew drink altogether?

- 1,800 mL
- 2,300 mL
- 2,800 mL
- 3,800 mL

4.MD.4: Make a line plot to display a data set of measurements in fractions of a unit.

This line plot shows the number of days that it rained and how much it rained on each rainy day for one month.



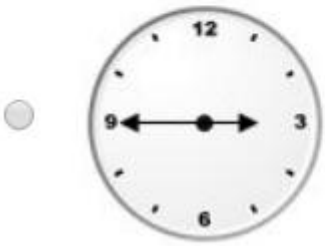
x = 1 day of rain fall

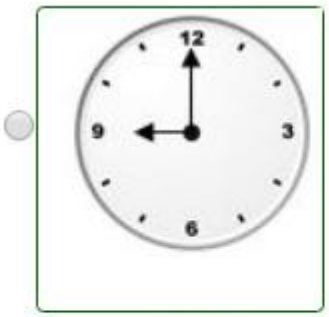
What was the total rainfall in inches for the month?

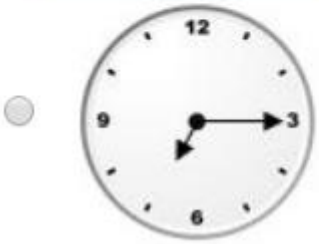
- $\frac{15}{4}$ in
- $\frac{10}{4}$ in
- $\frac{7}{4}$ in
- $\frac{6}{4}$ in

4.MD.5: Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.

Which set of clock hands show an angle with 90°?

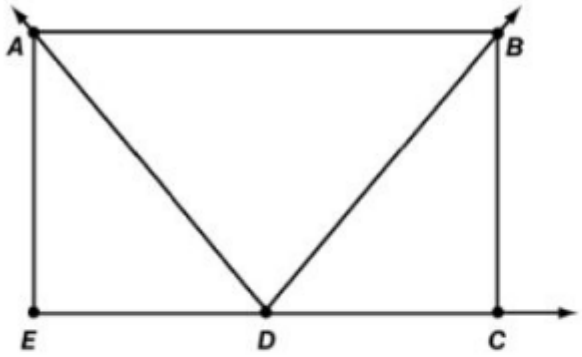






4.MD.6: Measure angles in whole-number degrees using a protractor.

Use the protractor tool to measure the angles in the figure below.



What is the measure of angle ADE?

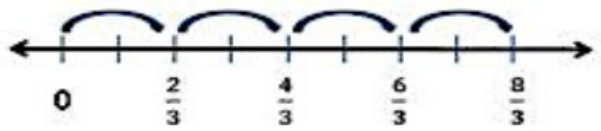
- 45°
- 50°
- 65°
- 130°

4.NF.4b: Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number.

Strategies for Operations with Fractions, Continued

Multiplying Fractions by a Whole Number Using a Number Line

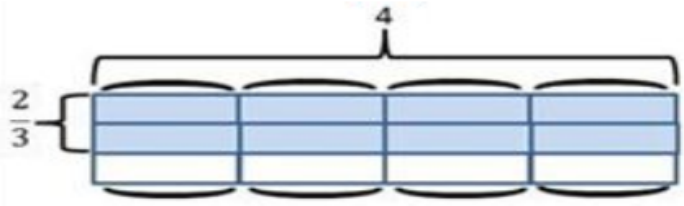
$$4 \times \frac{2}{3} = \frac{8}{3}$$



1) Divide the number line into the fractional parts based on the denominator. *(ex. thirds)*
2) See how much you should be jumping each time based on the numerator. *(ex. 2)*
3) Jump the fractional amount the number of times the factor indicates. *(ex. 4)*
4) Where you end is the product.

Multiplying Fractions by a Whole Number Using an Area Model

$$4 \times \frac{2}{3} = \frac{8}{3}$$



1) Create a box and divide it into fractional parts based on how many times the factor indicates into columns. (ex. 4)
2) Divide the rows based on the fraction's denominator and shade based on the numerator.
3) Count all shaded sections for a total product.

4.NF.4c: Solve word problems involving multiplication of a fraction by a whole number.

Strategies for Operations with Fractions, Continued

Model Drawing

Marcus eats ¾ bag of fruit each week. How many bags of fruit will he eat in 5 weeks?

1 week | ¾ |

5 weeks | ¾ | ¾ | ¾ | ¾ | ¾ | ?

¾ x 5 = ?

¾ + ¾ + ¾ + ¾ + ¾ = 15/4 or 3 ¾

Marcus eats 3 ¾ bags of fruit in 5 weeks.

Step by Step Model Drawing

Picture Reminder	*Task*
	**Read** the entire problem.
	**Rewrite** the question in sentence form, leaving a space for the answer.
	**Determine *"who"*** and the ***"what"*** is involved in the problem.
	**Draw** the unit bar(s) to model each variable.
	**Chunk** the problem and **adjust** the unit bars to match the information. **Fill in** the question mark.
	Correctly **compute** and **solve** the problem.
	**Write** the answer in the sentence. Make sure the answer **makes sense**.

4.NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.4 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.

1 Tell whether each equation is *True* or *False*.

a. $\frac{7}{10} + \frac{7}{100} = \frac{77}{100}$ ☐ True ☐ False

b. $\frac{6}{100} + \frac{2}{10} = \frac{62}{100}$ ☐ True ☐ False

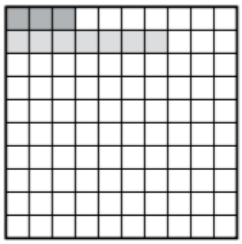
c. $\frac{9}{100} + \frac{3}{10} = \frac{93}{100}$ ☐ True ☐ False

d. $\frac{5}{10} + \frac{3}{100} = \frac{53}{110}$ ☐ True ☐ False

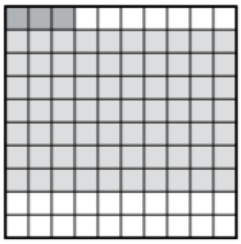
2 Alison buys $\frac{3}{10}$ pound of cheese. Anthony buys $\frac{70}{100}$ pound of cheese.

Which model represents the amount of cheese that Alison and Anthony buy altogether?

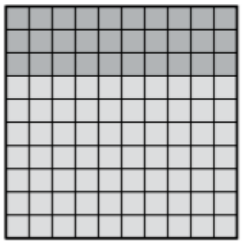
A



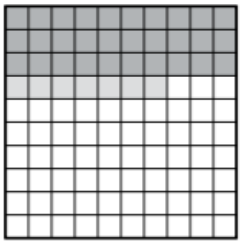
C



B



D



Answer #1:

a. **True**
b. **False**
c. **False**
d. **False**

Answer #2: B