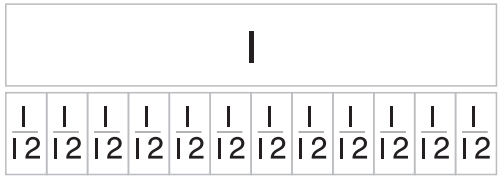
1. Ben uses $\frac{3}{12}$ pound of strawberries and $\frac{2}{12}$ pound of blueberries to make jam.



How many pounds of berries does Ben use to make jam?

_____ pound

2. To get the correct color, Johan mixed $3\frac{1}{4}$ quarts of white paint, $1\frac{2}{4}$ quarts of blue paint, and $2\frac{3}{4}$ quarts of green paint. How much paint did Johan make?

Johan made _____ quarts of paint.

3. Nick had $3\frac{1}{4}$ bottles of water for his wrestling practice. When he finished he had $1\frac{2}{4}$ bottles of water left. He said he used $2\frac{1}{4}$ bottles of water during the practice. Do you agree? Explain.

GO ON

4. The school carnival is divided into sections. The dunk tanks are in $\frac{1}{10}$ of the carnival. Games are in $\frac{4}{10}$ of the carnival. Student exhibits are in $\frac{5}{10}$ of the carnival.

Part A

Use the model. What fraction of the carnival is dunk tanks and games?

1									
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

The fraction of the carnival with dunk tanks and games is ☐.

Part B

How much greater is the part of the carnival with student exhibits than games? Explain how the model could be used to find the answer.

5. Ilene is making smoothies. The recipe calls for $1\frac{1}{4}$ cups of strawberries. How many cups of strawberries, written as a fraction greater than one, are used in the recipe?

_____ cups

6. Dillon's dad sells golf balls online. He sells $\frac{4}{5}$ of the golf balls. Select a way $\frac{4}{5}$ can be written as a sum of fractions. Mark all that apply.

Ⓐ $\frac{1}{5} + \frac{1}{5} + \frac{2}{5}$

Ⓑ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

Ⓒ $\frac{2}{5} + \frac{2}{5} + \frac{1}{5}$

Ⓓ $\frac{2}{5} + \frac{2}{5}$

Ⓔ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

Ⓕ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

GO ON

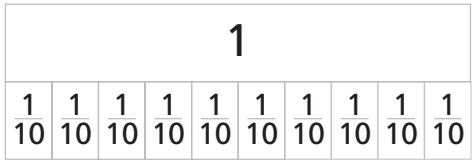
7. Betsy brought $\frac{6}{12}$ pound of trail mix on a camping trip. She ate $\frac{4}{12}$ pound of the trail mix. How much trail mix is left?

_____ pound

8. In a survey, $\frac{5}{10}$ of the students chose a dog and $\frac{1}{10}$ chose a fish as their favorite pet. What fraction shows the students who chose a dog or a fish as their favorite pet?

Part A

Shade the model to show your answer.



☐ of the students chose a dog or fish.

Part B

How are the numerator and denominator of your answer related to the model? Explain.

9. Match the equation with the property used.

$\frac{3}{5} + \left(\frac{2}{5} + \frac{1}{5}\right) = \left(\frac{3}{5} + \frac{2}{5}\right) + \frac{1}{5}$ •

$\left(4\frac{1}{8} + \frac{1}{8}\right) + 2\frac{7}{8} = 4\frac{1}{8} + \left(\frac{1}{8} + 2\frac{7}{8}\right)$ •

$3\frac{1}{5} + \left(5 + 1\frac{3}{5}\right) = 3\frac{1}{5} + \left(1\frac{3}{5} + 5\right)$ •

$\left(1\frac{4}{10} + 1\frac{1}{10}\right) + 3\frac{6}{10} = \left(1\frac{1}{10} + 1\frac{4}{10}\right) + 3\frac{6}{10}$ •

- Commutative Property
- Associative Property

GO ON

10. For numbers 10a–10e, select Yes or No to show if the sum or difference is correct.

10a. $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$ ○ Yes ○ No

10b. $\frac{6}{12} - \frac{2}{12} = \frac{8}{12}$ ○ Yes ○ No

10c. $\frac{5}{10} + \frac{2}{10} = \frac{7}{10}$ ○ Yes ○ No

10d. $\frac{6}{8} - \frac{4}{8} = \frac{2}{8}$ ○ Yes ○ No

10e. $\frac{3}{9} + \frac{2}{9} = \frac{5}{18}$ ○ Yes ○ No

11. SuLee has $8\frac{1}{4}$ yards of blue fabric and $4\frac{2}{4}$ yards of green fabric. How much more blue fabric does SuLee have than green fabric?

_____ yards more blue fabric

12. Aidan is making cinnamon apples. He needs $3\frac{1}{4}$ teaspoons of cinnamon. He needs $1\frac{2}{4}$ teaspoons of nutmeg.

Part A

Aidan incorrectly subtracted the two mixed numbers to find how much more cinnamon than nutmeg he needs. His work is shown below.

$$3\frac{1}{4} - 1\frac{2}{4} = \frac{12}{4} - \frac{4}{4} = \frac{8}{4} = 2$$

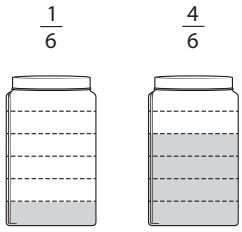
Why is Aidan's work incorrect?

Part B

How much more cinnamon than nutmeg will he need? Show your work.

GO ON

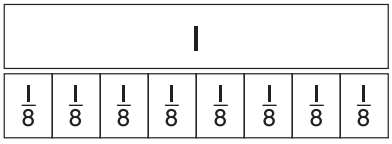
13. Jack has two jars of wax. One jar is $\frac{1}{6}$ full. The other jar is $\frac{4}{6}$ full.



Use the fractions to write an equation to find the amount of wax Jack has.

$\frac{1}{6}$	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{5}{6}$	☐	+ ☐	= ☐

14. Ellen needs $\frac{5}{8}$ yard of fringe for her scarf. Ling needs $\frac{2}{8}$ yard of fringe for her scarf. How much more fringe does Ellen need than Ling? Shade the model to show your answer.



Ellen needs _____ yard more fringe than Ling.

15. Mindi planted beans in $\frac{4}{10}$ of her garden and peas in $\frac{5}{10}$ of her garden. What fraction of the garden has beans or peas?

Mindi's garden has _____ beans or peas.

16. Draw a line to show the mixed number and fraction that have the same value.

$1\frac{3}{4}$	$5\frac{1}{6}$	$3\frac{2}{5}$	$3\frac{1}{4}$
$\frac{13}{4}$	$\frac{16}{5}$	$\frac{31}{4}$	$\frac{17}{6}$

17. Royce walks $\frac{3}{4}$ mile to school and $\frac{3}{4}$ mile home each day.

It will take Royce [2 / 3 / 4] days to walk 3 miles.

GO ON

18. Hector has 3 weeks before his first track meet. He recorded the amount of time he spent running during week 1 of his training. He spent $1\frac{6}{12}$ hours running on Tuesday, $2\frac{6}{12}$ hours running on Wednesday, and $1\frac{9}{12}$ hours running on Thursday.

Part A

How many hours did Hector run during week 1? Explain how you found your answer.

Part B

Hector wants to run 18 hours by his first track meet. Suppose he runs the same number of hours in week 2 and week 3 of his training as in week 1. Will he run enough hours to meet his goal? Explain.

19. Harrison ate $\frac{3}{12}$ of a sushi roll. Miles ate $\frac{5}{12}$ of the same sushi roll. How much more of the sushi roll did Miles eat than Harrison?

_____ of the sushi roll

20. For numbers 20a–20d, choose True or False for each sentence.

20a.	$6\frac{7}{10} + 2\frac{1}{10}$ is equal to $4\frac{8}{10}$.	○ True	○ False
20b.	$1\frac{2}{8} + 3\frac{7}{8}$ is equal to $4\frac{1}{8}$.	○ True	○ False
20c.	$1\frac{3}{5} + 2\frac{4}{5}$ is equal to $4\frac{2}{5}$.	○ True	○ False
20d.	$9\frac{5}{6} - 3\frac{2}{6}$ is equal to $6\frac{3}{6}$.	○ True	○ False

21. Winter break starts in $3\frac{4}{7}$ weeks. Write the mixed number as a fraction greater than one.

$3\frac{4}{7} =$ _____

STOP