

- 1 Four people are organizing four different parties during the weekend. Each party is ordering a certain amount of pizza for its guests. The table below shows how much pizza is being ordered and the number of guests at each party.

Party Organizer	Number of Pizzas	Number of Guests
Jacob	5	8
Kayla	6	10
Landon	2	4
Mindy	11	20

At which party will each guest have the most pizza?

$Jacob = \frac{5}{8} \rightarrow \frac{25}{40}$   
 $Kayla = \frac{6}{10} \rightarrow \frac{12}{20} \rightarrow \frac{24}{40}$   
 $Landon = \frac{2}{4}$   
 $Mindy = \frac{11}{20}$

- 2 Anna had 185 yards of fencing to make 40 equally sized fencing sections. How many yards of fencing did Anna use for each section?

$185 \div 40 = \frac{185}{40}$   

$$\begin{array}{r} 4\overset{25}{\cancel{0}} \\ 40 \overline{) 185} \\ \underline{160} \\ 25 \end{array} \rightarrow 4\frac{5}{8}$$
 TS: she used  $4\frac{5}{8}$  yd of fencing for each section.

- 3 Mr. Evers equally divides 7 packs of printing paper among the 3 printers at his office. How many packs of printing paper does each printer receive?

$7 \div 3 = \frac{7}{3} = 2\frac{1}{3}$

TS: each printer receives  $2\frac{1}{3}$  packs of paper.

- 4 Chloe has a piece of wood moulding that is 27 inches long. She cuts the moulding into 4 pieces of equal length. How long is each of the smaller pieces?

$27 \div 4 = \frac{27}{4} = 6\frac{3}{4} \text{ in}$

TS: Each of the smaller pieces are  $6\frac{3}{4}$  in long.

- 5 There are 5 classes of 5<sup>th</sup> graders at Smith Elementary School. There are 27 boxes of markers for the entire 5<sup>th</sup> grade.

If the boxes are distributed evenly among the classes, how many boxes will each class receive?

TS: Each class will receive  $5\frac{2}{5}$  boxes.

$27 \text{ boxes} \div 5 \text{ classes} = \frac{27}{5} = 5\frac{2}{5} \text{ boxes}$

- 6 DeAnna had 45 yards of yarn to make 8 scarfs. She used the same amount of yarn for each scarf.

How much yarn did DeAnna use for each scarf?

TS: DeAnna used  $5\frac{5}{8}$  yarn for each scarf.

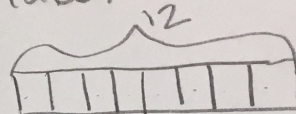
$45 \div 8 = \frac{45}{8} = 5\frac{5}{8} \text{ yard}$

- 7 Eight friends are sharing a cake. The cake is cut into 12 equal pieces.

How many pieces of cake will each friend get if the cake is divided equally?

Ans: Each friend will get  $1\frac{1}{2}$  cake.

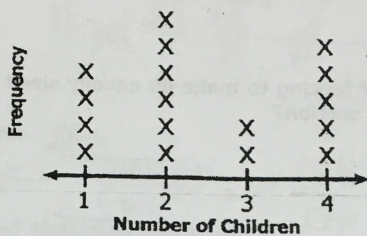
$$12 \div 8 = \frac{12}{8} = \frac{4}{8} = 1\frac{1}{2}$$



8 units = 12  
1 unit =  $12 \div 8 = 1\frac{1}{2}$

- 8 The line plot shows the results of a survey asking students how many pairs of tennis shoes they owned.

Number of Tennis Shoes

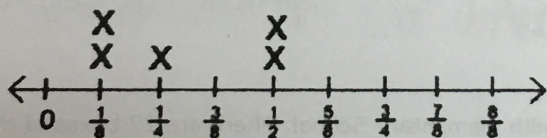


How many more students have 2 or 4 pairs of shoes than students who have 3 pairs?

$$20 - 4 = 11$$

$$11 - 3 = 8$$

- 9 Students weighed different objects on their desk to the nearest eighth of an ounce and recorded their results in the line plot.

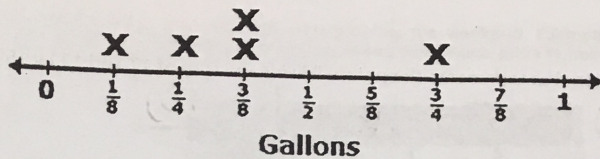


What is the total weight of all the objects in ounces?

$$(2 \times \frac{1}{8}) + \frac{2}{8} + (2 \times \frac{4}{8})$$

$$\frac{2}{8} + \frac{2}{8} + \frac{8}{8} = \frac{12}{8} = 1\frac{1}{2}$$

- 10 The line plot shows the amount of engine oil (in gallons) in five different 1-gallon jugs.



The oil will be poured from jug to jug so that all five jugs contain the same amount of oil. What fraction of a gallon will be in each jug?

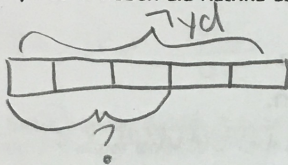
$$\frac{1}{8} + \frac{2}{8} + \frac{6}{8} + \frac{6}{8}$$

total  $\rightarrow \frac{15}{8}$

$15 \text{ eighths} \div 5 = 3 \text{ eighths} = \left(\frac{3}{8}\right)$

11

Katrina has 7 yards of ribbon. She uses  $\frac{3}{5}$  of the ribbon to make bows for wrapping gifts. How many yards of ribbon did Katrina use? TS: Katrina uses  $4\frac{1}{5}$  yd of ribbon.



$$\frac{3}{5} \text{ of } 7 \text{ yd}$$

$$\frac{3 \times 7}{5} = \frac{21}{5} = 4\frac{1}{5}$$

12

Cindy has enough money to buy  $2\frac{1}{4}$  pounds of flax seeds. She pours 44 ounces of flax seeds into a bag.

How many ounces of flax seeds does Cindy need to take out of her bag?

TS: Cindy needs to take out 8 oz of flax seed.

$$2\frac{1}{4} \text{ lb} = \frac{36}{4} \text{ oz}$$

$$= 2\frac{1}{4} \times (16)$$

$$= 2\frac{1}{4} \times (16 \text{ oz})$$

$$\begin{array}{r} 344 \text{ oz} \\ - 36 \text{ oz} \\ \hline 8 \text{ oz} \end{array}$$

13

How many bookmarks can Allison make with  $4\frac{1}{2}$  feet of fabric?

TS: she can make 18 bookmarks

$$4\frac{1}{2} \text{ ft} = \frac{\text{in}}{12}$$

$$= 4\frac{1}{2} \times (12 \text{ in}) = \frac{9 \times 12}{2} = 54 \text{ in} \div 3$$

$$\begin{array}{r} 18 \text{ bookmarks} \\ 3 \overline{) 54} \\ - 36 \\ \hline 18 \\ - 18 \\ \hline 0 \end{array}$$

14

How many inches are in  $4\frac{1}{2}$  feet?

$$4\frac{1}{2} \text{ ft} = \frac{54}{1} \text{ in}$$

$$= 4\frac{1}{2} \times (12 \text{ in}) = \frac{9 \times 12}{2}$$

$$= 54 \text{ in}$$

- 15 Write an expression that represents the phrase "divide the sum of 12 and 13 by 15".

$$(12+13) \div 15 \quad \text{OR} \quad \frac{(12+13)}{15}$$

- 16 A phrase is written in the box.

Add 9 and 3, then multiply by 4.

Write an expression that is equivalent to this phrase.

$$(9+3) \times 4 \quad \text{OR} \quad 4 \times (9+3)$$

- 17 A mathematical expression is given.

$$3x - 2$$

Write a verbal translation of this expression.

Two less than the product of  
3 and a number.

- 18 Write a word phrase that is represented by the expression:  $4 + 6x$

The sum of four and the  
product of six and an unknown number.