

Tuesday, 11 August 2020


Page 132

45


Rate

27 April 2019


Do you still remember the symbol for **rate**? Maybe this picture will help you.




= R3/Orange




= R20/kg







= R3/Banana



= R40/kg



= R2/Apple

100 km/h 	50 km/h 
120 km/h 	80 km/h 

1. How far did each car travel? Complete the table.

	1 hour	2 hours	3 hours	4 hours
Pink car	100 km	200 km	300 km	400 km
Purple car	50 km	100 km	150 km	200 km
Blue car	120 km	240 km	320 km	440 km
Green car	80 km	160 km	240 km	320 km

Term 2

2. Complete the following:



R80/kg



R12,50/litre

How much will you pay for:

- a. 1 kg
- b. 2 kg
- c. 3 kg
- d. 4 kg
- e. 5 kg
- f. 6 kg
- g. 7 kg
- h. 8 kg
- i. 9 kg
- j. 10 kg


How much will you pay for:

- a. 1ℓ
- b. 2ℓ
- c. 3ℓ
- d. 4ℓ
- e. 5ℓ
- f. 6ℓ
- g. 7ℓ
- h. 8ℓ
- i. 9ℓ
- j. 10ℓ

What is the rate?

Go to your nearest shop and find out what the rate is for:





60

Ratio

21 MAY 2016

In the class

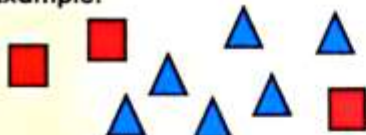
- How many children are in your class? 43
- How many are boys? 21
- How many are girls? 22
- What is the ratio between boys and girls?
21 : 22

At home

- How many family members do you have? 3
- How many are male? 1
- How many are female? 2
- What is the ratio between male and female?
1 : 2

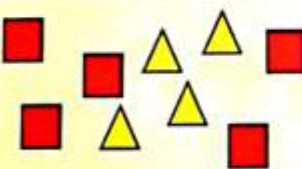
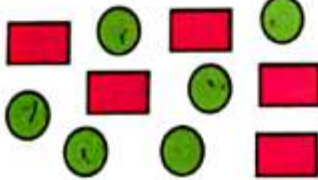
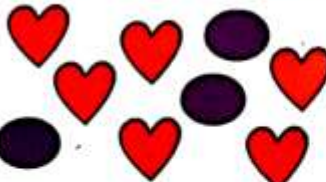

1. Complete the following table by writing the Ratios as fractions and as ratios using the word "to" and with a colon.

Example:



As a fraction:
 $\frac{3}{9}$ Three of the nine shapes are red squares.
 $\frac{6}{9}$ Six of the nine shapes are blue triangles

As a ratio:
 3 to 4 or 3:4

	Fraction	'to'	Colon
	$\frac{5}{9}$ red squares $\frac{4}{9}$ yellow triangles	5 to 4	5:4
	$\frac{5}{11}$ pink rectangle $\frac{6}{11}$ green circle	5 to 6	5:6
	$\frac{6}{9}$ red hearts $\frac{3}{9}$ purple ovals	6 to 3	6:3
	$\frac{8}{15}$ blue rectangles $\frac{7}{15}$ yellow stars	8 to 7	8:7

Term 2

166

2. Complete the following table .

During a class activity we played a variety of games in mixed boy and girl groups.	Ratio	How many children played the game?	Fraction Boys	Fraction Girls
a. Game 1: If there are 1 boy and 3 girls who played, the ratio is:	1 to 3 1:3	4	$\frac{1}{4} (1 \div 4)$ are boys	$\frac{3}{4} (3 \div 4)$ are girls
b. Game 2: If there are 4 boys and 5 girls who played, the ratio is:	4 to 5 4:5	9	$\frac{4}{9} (4 \div 9)$ are boys	$\frac{5}{9} (5 \div 9)$ ✓ are girls
c. Game 3: If there are 2 boys and 3 girls who played, the ratio is:	2 to 3 2:3	5	$\frac{2}{5} (2 \div 5)$ are boys	$\frac{3}{5} (3 \div 5)$ ✓ are girls
d. Game 4: If there are 6 boys and 5 girls who played, the ratio is:	6 to 5 6:5	11	$\frac{6}{11} (6 \div 11)$ are boys	$\frac{5}{11} (5 \div 11)$ ✓ are girls
e. Game 5: If there are 9 boys and 3 girls who played, the ratio is:	9 to 3 9:3	12	$\frac{9}{12} (9 \div 12)$ are boys	$\frac{3}{12} (3 \div 12)$ ✓ are girls

f. What is the ratio of boys to girls in your class? Show your answer by drawing it.

21:22

The recipe

The recipe says that for every 4 cups of sugar, 1 cup of butter is needed. If 50 cups of sugar is used, how many cups of butter is needed?

a. $475 \div 25 =$

$$\begin{array}{r} 19 \\ 25 \overline{) 475} \\ \underline{- 25} \\ 225 \\ \underline{- 225} \\ 0 \end{array}$$



b. $673 \div 32 =$

$$\begin{array}{r} 21 \text{ r}1 \\ 32 \overline{) 673} \\ \underline{- 64} \\ 33 \\ \underline{- 32} \\ 1 \end{array}$$

c. $1375 \div 25 =$

$$\begin{array}{r} 55 \\ 25 \overline{) 1375} \\ \underline{- 125} \\ 125 \\ \underline{- 125} \\ 0 \end{array}$$



d. $1984 \div 32 =$

$$\begin{array}{r} 62 \\ 32 \overline{) 1984} \\ \underline{- 192} \\ 64 \\ \underline{- 64} \\ 0 \end{array}$$

Going fast ...

How fast can you multiply 12 with all the units and then with the multiples of 10. What do you notice?

Example 2:

$$\begin{array}{r} 26 \text{ rem } 6 \\ 17 \overline{) 448} \\ \underline{-34} \\ 108 \\ \underline{-102} \\ 6 \end{array}$$

20 groups of 17 is 340

6 groups of 17 is 102

Test your answer:

$$\begin{aligned} & (26 \times 17) + 6 \\ & = (20 + 6) \times (10 + 7) + 6 \\ & = (20 \times 10) + (20 \times 7) + (6 \times 10) + (6 \times 7) + 6 \\ & = 200 + 140 + 60 + 42 + 6 \\ & = 200 + 100 + 40 + 60 + 2 + 6 \\ & = 200 + 100 + 40 + 60 + 40 + 2 + 6 \\ & = 300 + 140 + 8 \\ & = 448 \end{aligned}$$

a. $460 \div 19 = 24 \text{ r } 4$

$$\begin{array}{r} 19 \overline{) 460} \\ \underline{-38} \\ 80 \\ \underline{-76} \\ 4 \end{array}$$

b. $810 \div 25 = 32 \text{ r } 10$

$$\begin{array}{r} 25 \overline{) 810} \\ \underline{-75} \\ 60 \\ \underline{-50} \\ 10 \end{array}$$

a. $1250 \div 15 = 83 \text{ r } 5$

$$\begin{array}{r} 15 \overline{) 1250} \\ \underline{-120} \\ 50 \\ \underline{-45} \\ 5 \end{array}$$

b. $1964 \div 25 = 78 \text{ r } 14$

$$\begin{array}{r} 25 \overline{) 1964} \\ \underline{-175} \\ 214 \\ \underline{-200} \\ 14 \end{array}$$

Look at the words below. What do they all mean?

Equal sharing	Equal parts	Divided by	Ratio
per	Factors	Quotient	÷

1. Solve the following problems.

a. Richard earns R19 per hour as a student. If he worked 51 hours during the holidays, how much money would he earn? _____

Test your answer

$$\begin{array}{r}
 R. 19 \\
 \times \quad 51 \\
 \hline
 19 \\
 + 950 \\
 \hline
 R 969
 \end{array}$$

He would earn R969 in 51 hours

b. Themba earned R8 960. If he earns R56 an hour, how many hours did he work? _____

Test your answer.

$$\begin{array}{r}
 \times 160 \\
 56 \overline{) 8960} \\
 \underline{- 51} \\
 366 \\
 \underline{- 366} \\
 0
 \end{array}$$

He worked for 16 hours

D. NAIDOO
HOD

Term 2

2018.

c. I need to organise a big party. I have R3 640 in my budget for small gifts. The small gifts cost R13. How many people could I invite?

Test your answer.

$$\begin{array}{r}
 280 \\
 13 \overline{) 3640} \\
 \underline{- 26} \\
 104 \\
 \underline{- 104} \\
 0
 \end{array}$$

I can invite 28 people

D. NAIDOO
HOD



d. A pack of crayons cost R18 per pack. I have R950. How many packs can I buy? What will my change be?

Test your answer.

$$\begin{array}{r}
 52 \\
 18 \overline{) 950} \\
 \underline{- 90} \\
 50 \\
 \underline{- 36} \\
 14
 \end{array}$$

I can buy 52 packs of crayons and my change is R14

More money problems

Share with a friend or family member how you solved these problems. Now write your own word problem using money. Solve it.

59a

Sharing and grouping problems

11 Mar

Can you still remember what you did to groups of numbers to make them equal?

$$\begin{array}{|c|} \hline 7\ 000 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 8\ 000 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 9\ 000 \\ \hline \end{array} = \frac{24\ 000}{3}$$

Can you move the numbers to make 3 equal groups?

What operation can you use to determine the total?

$$\begin{array}{r} \div \\ \hline \end{array} = 8\ 000$$

Make a drawing of your work.

1. Complete the following:

a. Move the numbers to make 3 equal groups.

b. Write down an addition and multiplication sum for each.

i. $300, 400, 500 = 1\ 200$

a. $400 + 400 + 400$

b. 400×3

$= 1\ 200$ ✓

ii. $7\ 000, 8\ 000, 9\ 000 = 24\ 000$

a. $8\ 000 + 8\ 000 + 8\ 000$

b. $8\ 000 \times 3$

$= 24\ 000$ ✓

iii. $8\ 000, 10\ 000, 12\ 000 = 30\ 000$ iv. $14\ 000, 16\ 000, 18\ 000 = 48\ 000$

a. $10\ 000 + 10\ 000 + 10\ 000$

b. $10\ 000 \times 3$

$= 30\ 000$ ✓

a. $16\ 000 + 16\ 000 + 16\ 000$

b. $16\ 000 \times 3$

$= 48\ 000$ ✓

v. $3\ 000, 5\ 000, 7\ 000 = 15\ 000$

a. $5\ 000 + 5\ 000 + 5\ 000$

b. $5\ 000 \times 3$

$= 15\ 000$

vi. $13\ 000, 15\ 000, 17\ 000 = 45\ 000$

a. $15\ 000 + 15\ 000 + 15\ 000$

b. $15\ 000 \times 3$

$= 45\ 000$

19 2. Calculate the following:

- a. Six groups of 900. 5400 ✓ 6 × 900 =
- b. Five groups of 1 500. 7 500 ✓ 1 500 × 5 =
- c. Twelve groups of 1 200. 14 400 ✓ 12 × 1 200
- d. Fifty groups of 300. 15 000 ✓
- e. Thirty groups of 80. 2400 ✓ 30 × 80
- f. A hundred groups of 200. 20 000 ✓

3. Calculate the following:

- a. Share 16 000 between 4. 64 000 ÷ 4 = 4 000
- b. Share 15 000 between 3. 45 000 ÷ 3 = 5 000
- c. Share 12 000 between 5. 60 000 ÷ 5 = 24 000
- d. Share 13 000 between 50. 65 000 ÷ 50 = 260
- e. Share 12 000 between 30. 36 000 ÷ 30 = 400
- f. Share 18 000 between 300. 54 000 ÷ 300 = 60

Divisibility rules. These divisibility rules will help you with sharing.

A number is divisible by 2 if the last digit is 0, 2, 4, 6 or 8.

A number is divisible by 3 if the sum of the digits is divisible by 3.

A number is divisible by 4 if the number formed by the last two digits is divisible by 4.

A number is divisible by 5 if the last digit is either 0 or 5.

A number is divisible by 10 if the last digit is 0.