**P.5 MATHEMATICS LESSON NOTES TERM III 2024**

**Topic : Money**

**Subtopic : Simple rate**

**Content : simple rates**

A book cost sh.500. What is the cost of 3 similar books?

1 book = sh. 500

3 books = sh. 500 x 3

= **sh. 1500**

The cost of 5 books is 2,000/=. Find the cost of one book?

5 books = sh. 3,000 5 bks = sh. 2,000

1 book = sh.  1bk = sh. 

**=Sh. 400**

**Activity**

1. Sarah bought 4 trays of eggs at sh. 80,000, what is the cost of one tray?
2. Amos bought 5kg of meat at sh. 7,000 per kilo. How much did he pay for 5kg?
3. 2 books cost sh. 24,000. What can 1 pay if one needs only a book?
4. Find the cost 12 coloured pencil if each pencil costs sh. 200.
5. 4 sweets cost sh. 2,000. What is the cost of the sweet?
6. 1 school bag costs sh. 35,000. What will be the cost of 1 orange?
7. A heap of 20 orange cost sh. 1,000. Find the cost of 1 orange
8. 10 mangoes costs sh. 5,000. What is the cost of 1 mangoes?
9. 10 mangoes cost sh. 5,000. What is the cost of 1 mangoes?
10. 1 kg of sugar costs sh. 3200. Find the cost of 6kg.
11. A dozen of dresses costs sh. 144,000. What is the cost of one dress?

**Topic : Money**

**Subtopic : Simple rates**

**Content : More about simple rate**

The cost of 6 cups is sh. 1200. Find the cost of 10 similar cups

**6cups = sh**. 1200

**1 cup = sh**. 

**10 cups = sh**. 

**= sh**. 200 x 10

**= sh**. 2000

3 pencils cost sh. 1500. How many pencils will Abel buy with sh. 4500

3 pencils = sh. 1500

1 pencil = sh. 

= sh. 500

Therefore = sh. 

= 

= **9 pencils**

Sh. 1500 = 3 pencils

1 sh = sh.  x sh. 45003

= (3 x 3) pencils

= **9 pencils**

**Activity**

1. The cost of 2 boxes is sh. 1000. What is the cost of 10 boxes?
2. 5 Mathematical sets cost sh. 5,000. What is the cost of 4 such sets?
3. 7 bars of soap cost sh. 49,000. What is the cost of 9 similar bars of soap?
4. 8 show tickets cost sh. 8000. Find how much will 12 such tickets buy?
5. A boy bought 12 pencils at sh. 2400. How was he to pay for 3 similar pencils?
6. 4 boxes of chalk cost sh. 10,000. What is the cost of 11 similar boxes of chalk?
7. 8 dresses cost sh. 64000. Find the cost of 10 similar dresses.
8. 3 pencils cost sh. 450. What is the cost of 10 pencils?
9. Sempa went to buy 7kg of sugar. How much will he pay if 6kg costs sh. 72,000?

**Topic : Money**

**Subtopic : Shopping list**

**Content : Working out the shopping lists and balances**

A man had sh. 50,000, he bought 2kg of sugar at sh. 1200 per kilo, 3 bars of soap at 4,000 per bar. How much change did he have after buying?

|  |  |  |  |
| --- | --- | --- | --- |
| **Sugar**  Sh. 1200  x 2  sh. 2400 | **Sugar**  Sh. 4000  x 3  sh. 124000 | **Total**  Sh. 12000  + 2400  sh. 14400 | **Change**  Sh. 50000  - Sh. 14400  sh. 35,600 |

A man had a change of sh. 35,600

**Activity**

1. A mother had sh. 5000 and bought the following items;

12 exercise books at sh. 100 each, a geometry set at sh. 1500 and 2 pencil at sh. 200 each. Calculate her change

1. Amos bought the following items from the market.

5kg of meat at sh. 2200 per kg, 500g of curry powder at sh. 900 per kilogram, 2 bars of soap all for sh. 1400. If Amos had sh. 20,000. Calculate her change.

1. Nankya had sh. 3500. She went to the shop and 2 dolls at sh. 700 per doll and 12 coloured pencils at sh. 1200 each. What change did she get?
2. Ankunda had sh. 500. He bought 4 pancakes at sh. 50 each and 2 samosas at sh. 100 each. Calculate Ankunda’s change after buying.
3. Otim had sh. 20,000 and bought 4 rabbits at sh. 2,500 each and 2 piglets at sh. 4250 each. How much money was left?
4. A trader bought the following items, 20 pineapples at sh. 400 each, 2 tins of tomatoes at sh. 600 each. 1 sack of oranges at sh. 12000.
5. How much money did she spend?
6. If she had sh. 35,000 calculate he change after buying.

**Topic : Money**

**Subtopic : Shopping bill / table**

**Content : completing bill tables**

A mother gave the shopping list below to her child. Study it and complete it.

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Quantity | Unit cost | Amount |
| Blue band | ½ | Sh. 4,600 | Sh. 2,300 |
| Bread | 3 loaves | Sh. 800 | Sh. 2,400 |
| Tea leaves | ¼ kg | Sh. 6,000 | Sh. 1,500 |
| Sugar | 4 kg | Sh. 1,200 | Sh. 4,800 |
| Total |  |  | Sh. 10,000 |

**Calculation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Blue Band (Amount)**  ½ x sh 46002300  Sh. 2300 | **Bread (Unit cost)**      = 800 | **Sugar (Quantity)**      Sh. 4 | **Tea leaves (Amount)**  x sh 6000 1500  Sh. 1500 | **Total**  Sh. 4 8 0 0  Sh. 2 4 0 0  Sh. 2 3 0 0  Sh. 1 5 0 0  Sh. 10 0 0 0 |

**Activity**

Open page 24 of MK pupil’s book 5

Open page 146 of the new MK 5

**Topic : Money**

**Subtopic : Profit**

**Content : finding profit using selling price and buying price**

Profit is realized when we sell an item at a higher price than cost price.

Profit = selling price – cost price

P = SP C.P

**Example**

Abudul bought a shirt at sh. 3,000 and later sold it at sh. 3200. What was the profit he got?

S.P = Sh. 3200

C.P = Sh. 3000

Profit = S.P - B.P

= Sh. 3200 – Sh. 3000

**= Sh. 200**

The marked price of a sofa set is sh. 450,000. If it is sold at sh. 550,000. How much was the profit?

Profit = S.P – B.P

= Sh. 550,000 – sh. 450,000

Sh. 550,000

- sh. 450,000

**Sh. 100,000**

**Activity**

1. The cost of a pair of shoes is sh. 12,500. A shopkeeper sold at sh. 150,000. Calculate the profit made.
2. A tailor made a dress at a cost of sh. 35,000 and sold it at sh. 40,000. Calculate the profit gained.
3. A man bought a coat at sh. 81,000 and later sold it at sh. 90,000. What was her profit?
4. Agaba bought a pen at sh. 1850 and sold it at sh. 3400. What was her profit?
5. A goat is sold at 15 0,000. What was the profit if it was bought at sh. 120,000?
6. A shopkeeper sold a bag of rice for sh. 220,000 which she had bought at sh. 190,000. What is her profit?
7. What profit was made on a roll of fabric sold at sh. 375,500 but bought at sh. 216,800?
8. A shirt was bought at sh, 13,200 and sold at sh. 18,650. Find the profit obtained by6 the seller.
9. The marked price of a radio is sh. 20,000. If it is sold at sh. 250,000, find the profit on it.
10. A dozen of cups was bought at sh. 135,000 and later sold at sh. 152,000. What was the profit made.

**Topic : Money**

**Subtopic : Selling, buying, profit**

**Content : Finding selling price using Buying price and Profit**

Profit = S.P – C.P

S.P = P + C.P

C.P / B.P = Sp – profit

Annet bought a tin of oranges at sh. 14,000. She later sold it at a profit of sh. 4,000. At what price did she sell the oranges?

S.P = C.P + P

= Sh. 14000 + Sh . 4000

sh. 14000

Sh. 4000

**Sh. 18000**

**Activity**

1. Kassim sold a plate for sh. 1400. He made a profit of sh. 300. How much did he buy it?
2. A radio was bought at sh. 28,000. After selling a profit of sh. 4,000 was made on it. Calculate the selling price of the radio.
3. Nabisere bought a radio at sh. 48,000 and sold it at a profit of 10,000. How much did she sell the radio?
4. Mr. Katumba bought a cow at sh. 190,000. After selling it a profit of sh. 35000. What is the selling price of the cow?
5. Bantariza sold 3 cows and made a profit f 135,000. Find his buying/ cost price if he sold each cow at sh. 230,000.
6. A school sells uniform at sh. 16000 each and makes a profit of sh. 4500 on each uniform. What is the cost price of each uniform?
7. A profit of sh. 4000 was realized after selling an article of sh. 38,000. Find the amount used to buy the article
8. John bought a telephone at sh. 49000 and later sold it to Javan at a profit of sh. 1,000. How much did Jovan pay for the telephone?
9. A book costs sh. 700. At what price must be sold in order to get a profit of sh. 150?
10. Derrick sold each pen at a profit of sh. 50. How much did he buy each pen if he was selling a pen at 1250?

**Topic : Money**

**Subtopic : Loss**

**Content : Finding loss using cost price and buying price**

Loss: Is when the selling price of an item is less than its buying or cost price

**Thus:** Loss = B.P\_ S.P

Jagwe bought a goat at sh. 120,000 and sold it to Deo at sh. 100,000. What loss did he make?

C.P = S. 120,000

S.P = Sh. 100,000

Loss = C.P – B.P

Sh. 120,000

* Sh. 100,000

**Sh. 20,000**

**Activity**

1. The cost price of a radio is sh. 100,000, If it is sold at sh. 80,000, find the loss made.

Martha bought an umbrella at sh. 12000 and sold it sh. 9000. What was the loss?

1. A pair of shoes cost sh. 25,000. It was later sold at sh. 16,500. What was the loss?
2. Calculate the loss made on a crate of soda which was bought at sh. 72,000 and sold at sh. 61,500.
3. Atim bought a mobile phone handset at sh. 350,000. She later sold it at sh. 260,450. What loss did she incur?
4. A trader bought soap worth sh. 760,800. He later sold it at sh. 675,500. What loss was made?
5. Abudul’s car depreciated from Ug. Shs. 5,000,000 to Ug.sh. 4500000. For how much did it depreciate?
6. The price of a kilo – gram of sugar was reduced from sh. 3200 to sh. 2400. By how much did it reduce?
7. After buying a tray of sh. 82000, the price of a tray dropped to sh. 7800. By how much did it drop?
8. Amin’s salary was reduced from Ug. Shs. 180,000 to Ug. Sh. 165,000. Find the reduction.

**Topic : Money**

**Subtopic : Loss**

**Content : Finding the cost price or selling price when loss is given**

Loss = C.P – S.P

Cost price= Loss + S.P

Selling price= Cost price – Loss

Kizito bought a ball at sh. 15000. He sold it and made a loss of sh. 3000. What was the selling price of the ball?

Selling price = C.P – Loss

= Sh. 15000 – Sh. 3000

Sh. 15000

- Sh. 3000

**Sh. 12000**

**Activity**

1. A bunch of motooke was bought at sh. 9000. It was sold at a loss of sh. 1000. What was the selling price?
2. A sheep was bought at sh. 25000. It was sold at a loss of sh. 25,000. It was sold at a loss of sh. 9,000. What is the selling price?
3. A cupboard was bought at sh. 70,000 and later sold at a loss of sh. 15000. What was the selling price of the cupboard?
4. Adeke bought 5 sacks of maize flour at sh. 175,000. She sold them making a profit of sh. 55,650. Find the selling price.
5. After selling a cow at sh. 350,000, a farmer made a loss of sh. 1000,000. Find how much the farmer bought the cow.
6. Ayiko sold 4 goats at sh. 600,000 and made a loss of 65,000. How much did he buy the goats?
7. Mary sold a pair of shoes at sh. 26000 and made a loss of sh. 5,000. How much did she pay for the shoes?
8. A trader sold a box of soap at Ug. Sh. 17500 making a loss of sh. 1800. What is the buying price of the soap?
9. A piece of land was sold at sh. 10,500,000 at a loss of sh. 500,000. Find the buying g price of the land.

**Topic : Money**

**Subtopic : Calculating the cost**

**Content : Finding the total cost**

John went to the market and bought a box of soap at sh. 240,000. He used sh. 50,000 for transport and gave sh. 2000 to a porter who carried the box. Find how much he spent on soap.

Buying price = sh. 240,000

Transport cost = sh. 50,000

Labour cost = sh. 2,000

Total = sh. 292,000

**Activity:**

1. Agnes bought a 50kg sack of sugar at sh. 117,500. She paid sh. 2,000 to the man who took it to the bus stage at sh. 2500 for transport. If she wants to get a profit of sh. 12000, how much should she sell the sack of sugar?
2. Angella bought 2 dozens of shirts at sh. 540,000. She hired a man to carry to the tax park at sh. 1500 and used sh. 24000 for transport. If Angella sold the shirts and at a profit of sh. 94500, at what price did she sell each shirt?
3. Teo bought good worth sh. 860,000. She spent sh. 3,500 on airtime when ordering for them sh. 13,800 to the porter who loaded and sh. 75000 for transport. Calculate the total cost of the goods.
4. Asiimwe bought a cow at sh. 670,000, used sh. 110,000 to transport it to the farm. She paid sh. 35,000 for the permit and sh. 5500 on the ropes. Find the total cost of the coco.

**Topic : Money**

**Subtopic : Pricing**

**Content : Calculating the price of an item**

John went to the market and bought 50 bars of soap at sh. 200,000. He used sh. 3,000 for transport and gave sh. 2000 to a porter who carried the box. Find how much he would sell each bar of soap.

Buying price = sh. 200,000 sh. 250000

Transport cost = sh. 3,000 50

Labour cost = sh. 2,000 sh. 5000

Total = sh. 250,000

**Activity:**

To be extracted from MK book 5 page 96

**Topic : Money**

**Subtopic : Fare**

**Content : calculating transport fare**

The fare from Kampala to Mukono is sh. 2400. Find how much will Mugisha pay and his wife.

Mugisha = sh. 2400

Wife = Sh. 2400

= **Sh. 4800**

A man, a wife and their two children travelled to the village. If the fare for each adult is sh. 2500 and sh. 1000 per child, how much did the family pay to the conductor?

Amount from the adult sh. 2500 x 2 = sh. 5000

Amount from the children sh. 1000 x 2 =sh 2000

Total among paid = sh. 5000

+ sh. 2000

**Sh. 7000**

**Activity**

1. Okwi travelled from Sudan by bus and back. How much did he pay if he paid sh. 9000 for each journey?
2. John went to two and bought a box of books containing 144 books at sh. 92000. He used sh. 3500 for transport and paid sh. 2000 to the porters who helped him. If he wants to get a profit of 3300/= after selling, how much must he sell each book?
3. A father travelled with his family; wife and 3 sons to the village. If each adult is charged sh. 4000 and sh. 2000, how much did the father pay to the conductor?

**Topic : LENGTH, MASS AND CAPACITY**

**Subtopic : Measuring length**

**Content : Measuring and estimating Length**

**Length:** It is the distance between two points

**Length / distance** is measured in centimeters, metres, mm, km, etc.

**Activity**

Measure using the length of the following;

- Table, desks, school gate. books, chalkboard,

**Items to use**

- ruler, string. Tape measure, rope

**Record in the table below**

|  |  |
| --- | --- |
| Item | Length in cm |
| Table |  |
| Chalkboard |  |
| Book |  |
| Desk |  |

**Topic : Length**

**Subtopic : Conversion of metric units**

**Content : Expressing centimeters to millimeters and vice versa**

Km Hm Dm M dm cm mm

1cm = 10mm

10mm = 1cm

1mm = cm

Cm to mm (we multiply by 10)

mm to cm (We divide by 10)

1. Change 2cm to mm

1cm = 100mm

2cm = (2x10) mm

= **20mm**

1. Express 600mm to cm

1mm =  cm

600mm = () cm

= **6cm**

**Activity**

1. Express the following mm to cm
2. 2000mm
3. 4000mm
4. 250mm
5. 25mm
6. 300mm
7. Change the following to mm
8. 4cm
9. 5cm
10. 0.5cm
11. 0.2cm
12. 40cm

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of metric units**

**Content : Expressing meters to centimeters to millimeters and vice versa.**

Km Hm Dm M dm cm mm

1 0 0 0

1 0 0

1 metre = 100cm

1 metre = 1000mm

**Reverse**

1cm = m

1mm = m

1. Convert 2 metres to centimeters

1m = 100cm

2m = (2x100)cm

= **200cm**

1. Express 3 metres to millimeters

1m = 1000mm

3m = (3x1000) mm

= **3,000mm**

1. Change 2400cm to metres

1cm =  m

2400cm = ( x 2400) metres

= **24metres**

1. Convert 2400mm to metres

1m = 1000mm

1mm = 1m

1mm =  m

2400mm = ( x 2400)m

= m

= **2.4m**

**Activity**

1. Express the following to cm
2. 20m
3. 2.4m
4. 0.2m
5. 1 ½ m
6. Change the following to millimeters (mm)
7. 4m
8. 16m
9. 4.6m
10. 2 ½ m
11. Express the following to metres
12. 2000cm
13. 40000mm
14. 280cm
15. 490mm
16. Agiza ran a distance of 100,000 millimetres. Change this distance to;
17. Centimeters
18. Metres

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of units**

**Content : Expressing kilometers to metres and vice versa**

Km Hm Dm Mm dm cm mm

1 0 0 0

1km = 1000metres

1 m = km

1. Convert 3km to metres

1km = 1000metres

3km = (3 x 1000)m

= 3,000m

1. Express 25000 metres to kilometers

1000m = 1km

1m = km

25000m = ( x 25000) km

= 25km

**Activity**

1. **Change the following metres to km**
2. 5000m
3. 16500m
4. 3125m
5. 648m
6. 440m
7. 25000m
8. Change the following kilometers to metres
9. 5km
10. 7km
11. 9km
12. 93km
13. 36km
14.  km

**Topic : Length, Mass and Capacity**

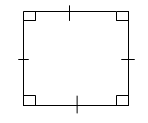
**Subtopic : Finding Perimeter**

**Content : Perimeter of a square**

**Perimeter** is the total distance around any object / figure.

**Perimeter of a square**

**S**

 Perimeter = Add all sides

= S + S + S + S

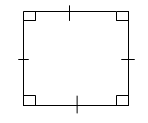
**S**

**S**

= 4S

**S**

**Examples**

Find the perimeter of the square below

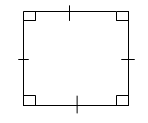
Perimeter = 4S

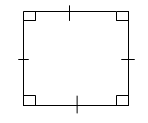
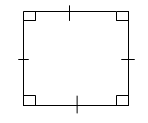
**8cm**

= 4 x 8cm

= 32cm

**Activity**

Workout the perimeter of the squares below

1. 

**13dm**

**3mm**

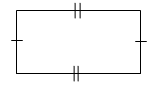
**10m**

1. A square garden has its side; 4m. Find the distance around the garden.
2. A square compound of length 16m is to be fenced using barbed wire. Find the length of the wire needed to fence it.
3. Workout the perimeter of a square whose side are 20cm each.

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Perimeter**

**Content : Perimeter of a rectangle**



= 2L + 2w

P = **2(l+W)**

**L**

Perimeter = L + w + L + w

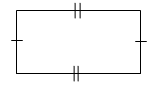
**w**

**W**

= L + L + w + w

**L**

Find the perimeter of the rectangle below



Perimeter = 2 (L+W)

**4cm**

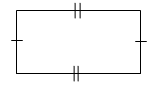
= 2 x (8cm + 4cm)

**8cm**

= 2 x 12cm

= **24cm**

A rectangular field has a length of 45m and 25m. Find the total distance around the field.

 **Method 1**

**Method 2**

P = 2 (L + W)

= 2(45 + 25) cm

= 2 x 70cm

= **140cm**

P = 45m + 25m + 45m + 25m

**25m**

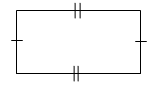
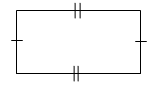
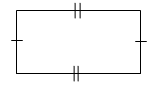
= 70m + 70m

**45m**

= **140m**

**Activity**

**9m**

Find the perimeter of the rectangles below

**6dm**

**4cm**

**10dm**

**14m**

**6cm**

1. A rectangular play ground has a length of 64m and a width of 40dm. calculate the distance around the playground.
2. Our class room measures 800cm long and 600cm wide. Find the distance around the class room. 
3. Workout the perimeter of the kite below

7m

11m

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Perimeter**

**Content : Perimeter of a triangle**

11m 12m **Perimeter** = S + S + S

= 11m + 10 m + 12m

10m = 33m

**Perimeter** = 6cm + 8cm + 10cm

8cm 10cm = 14cm + 10cm

= 24cm

6cm

**Perimeter** = 15dm +13dm +13dm

13dm = 15dm + 26dm

= 41dm

15dm

**Activity**

Workout the perimeter of the triangles given

|  |  |
| --- | --- |
| 4cm 8cm  5cm | 13dm  10dm |
| 12m  8m  **3.**  16m | **4.** 15m  10m  22m |
| **5.** 7mm  9mm 18mm | |

**6**. The sides of a triangle are 32dm, 48dm and 45dm, workout the distance around the triangle.

**7.** Find the perimeter of a pentagon whose length is 6cm

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Perimeter**

**Content : Perimeter of the combined figure**

Workout the perimeter of the figure below

P = Add all the sides

= 10cm + 3cm + 6cm + 5cm + 4cm + 8cm

= 13cm + 15 + 8cm

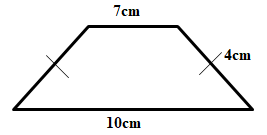
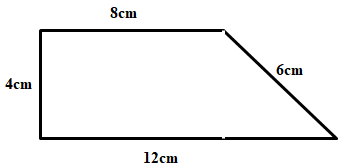
**= 36cm**

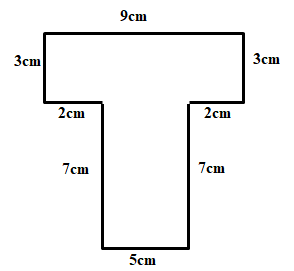
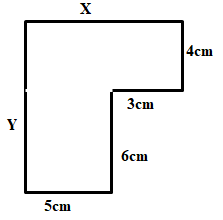
**10cm**

|  |  |
| --- | --- |
| **8cm**  **5cm** | **3cm**  **6cm** |
| **4cm** |

**Activity**

Find the perimeter of the following shapes

1. Find the value of

P and y

1. Workout its perimeter

**Topic : Length, Mass and Capacity**

**Subtopic : Area**

**Content : Area of a square and a rectangle**

**Area** is the spaces covered by an object. It is measured in squared units like m**2**, cm**2**, km**2**, dm**2** etc.

Find the area of the figure below

Area S S

= 13m x 13m

13m

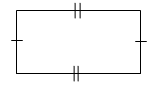
= 169m2

Workout the area of the rectangle below

Area = L x W

= 12cm x 8cm

= 96cm2



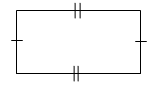
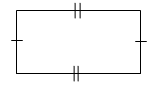
8cm

12cm

**Activity**

1. Workout the area of the following figures

6ddm

1. 

8cm

9m

9dm

12cm

12m

1. Nakku made a carpet whose length was 7cm and width 5cm. Find its area.
2. Find the area of a rectangle whose length is 9cm and width 6cm
3. A square garden has a length 50m. Calculate the area of the garden.
4. One side of a square piece of land is 100m. Find its area.
5. Find the area of the grazing field whose length is 32m and 13m wide.
6. Our classroom is 8m long and 5m wide. Find the area of the classroom.
7. Workout the area of a rectangular field whose length is 15m and its width is 7m
8. Below is a square. Find its area.

**20dm**

1. Find the area of a square tile whose sides measure 22cm.

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Area**

**Content : Area of triangle**

Area of a triangle = ½ x b x h

b = base

**h** h = height

b

**b**

Workout the area of a triangle below

Area of D =  x b x h

7cm =  x 10 5cm x 7cm

= 5cm x 7cm

10cm **= 53cm2**

Workout the area of a triangle below

Area =  x b x h

***4cm***

*=  x 8 cm x 15cm*

***1***

*8cm* = 4cm x 15cm

**= 60cm2**

15cm

**Activity**

Workout the area of the following figure 9m

5cm 10cm 12d 8m

6cm 12cm 16dm

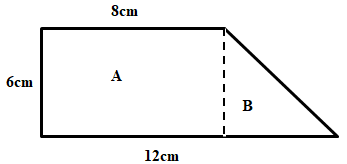
1. The base of a triangle is 10cm and its height is 8cm. Find its area.
2. Find the area of a triangle whose base is 10cm and height 4cm
3. The base and height of a triangular piece of land is 12m and 12m respectively. What is its area?
4. Jerom bought a triangular piece of land with a base 18m and height 20m. Workout the area of the land.

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Area**

**Content : Area of jointed / combined figures**

Workout the area of the figure below



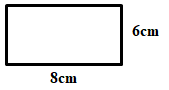
**Area of B** **Area of B**

Area =  x b x h

4 8 cm2

+ 1 2 cm2

**6 0 cm2**



Area = L x W

= 8cm x 6cm

= **48cm2**

2cm

4cm

6cm

=  x 4 cm x 6cm

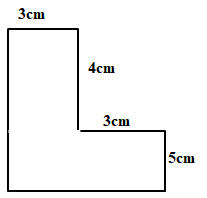
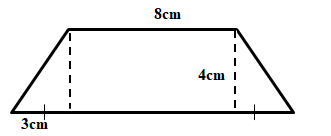
1

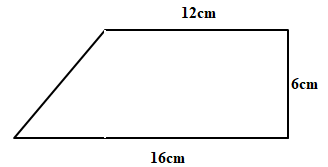
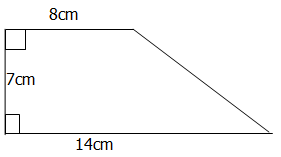
= 2cm x 6cm

**= 12cm2**

**Activity**

Workout the area of the following shapes

10cm

5cm

3cm

4cm

**Topic : Length, Mass and Capacity**

**Subtopic : Finding Area**

**Content : Finding the area of the shaded part in combined part.**

Find the area of the shaded part in the figure below.

**Area of the whole figure**

Area = L x L

= 12cm x 12cm

= 144cm2

**Area of a triangle**

 x b x h

x 12cm2 x 12cm

6cm x 12cm

**72cm2**

**Area of the shaded parts**

Area of the whole – Area of Triangle

144cm2 – 72cm2

**72cm2**

12cm

12cm

**Activity**

In the diagram below, find the area of the shaded parts

10cm

5cm

More questions from Mk book 5 page 115

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of metric units**

**Content : changing Kilograms to Grams**

Changing kilograms to grams

Kg Hg Dg Gd dg cg mg

1 0 0 0

1kg = 1000g

1. Change 3kg to grams

1kg = 1000g

3kg = (3 x 1000) g

**= 3000g**

1. Express 2 ½ kg to grams

1kg = 1000g

2 1/2kg – 2 ½ kg x 1000

(  x 1000 500)g

(5 x 500) g

**= 2500g**

**Activity**

Change the following kilograms to grams

1. 2.5kg
2. 34kg
3. 14kg
4. 100kg
5. 7.2kg
6. 5 ¼ kg
7. kg
8. Mugalula bought 4kg of meat for the family. How many grams did he buy?
9. The total weight of a man and his wife is 104kg. Express their weight in grams.

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of metric units**

**Content : Changing Grams to Kilograms**

Converting grams to kilograms

1000kg = 1kg

1g = () kg

1. Express 5000g to kilograms

1g = ( x 5000) kg

(1 x 5) kg

**5kg**

1. Change 750g to kg

1kg = kg

750g = ( x 50) kg

 kg

**0.75kg**

**Activity**

1. Express the following from grams to kilograms
2. 50,000g
3. 2350g
4. 7980g
5. 4000g
6. Ogwal’s bag weighs 5,900g, How heavy is it in kg?
7. Express 420g to kilograms

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of units**

**Content : Changing Litres to Millilitres**

Converting litres to milliliters

**Note;**

1 litre = 1000milliltres or cubic centimetres

1litre = 1000m / cc

**Examples**

1. Convert 2 litres of milliliters

1l = 1000ml

0.5l = (0.5 x 1000) ml

(5x100) ml

= 500ml

**Activity**

Express the following to milliliters (mls)

1. 3litres
2. 6litres
3. 4.5litres
4. 12litres
5. 2 ½litres
6. 3 litres
7. litres
8. Joel measured 20 litres of water and powered it in a jerrycan. How many millitres did he measure?
9. Change 0.751 to ml.

**Topic : Length, Mass and Capacity**

**Subtopic : Conversion of units**

**Content : Changing Millilitres to Litres**

Converting millitres to litres

1000mls = 1litre

1ml = ( ) litres

Note: Capacity in litre = 

1. A box containing 25000ml of water. How many litres of water are in the box?

1ml = l

25000mls = ( x 25000) litres

(1x25) litres

**25 litres**

1. Change 6250 mls to litres

Capacity = 

= l

l

**6.25litres**

**Activity**

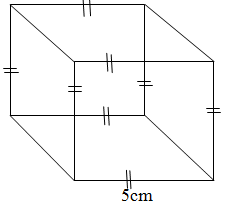
Express the following to litres

1. 2000mls
2. 5000mls
3. 250mls
4. 750mls
5. 4860ml
6. 25cc
7. 150cc
8. A bottle containing 6500mls of milk. Find the capacity of the bottle in litres
9. Abdul’s cup is labeled 500ml. If he takes 2 cups of water from his cup, how many litres does he drink?
10. Change 220000mls to litres

**Topic : Length, Mass and Capacity**

**Subtopic : Volume and capacity of cuboid / cube**

**Content : Finding Volume and capacity of cuboid / cube**

**Cube Cuboid**

L

W

H

Vol. = L x L x L V = L x W x H

= L3

Capacity = () litre

**Examples**

1. Find the volume of the cuboid

Volume = L x W x H

= 5cm x 4cm x 3cm

= 20cm2 x 3cm

= 60cm3

1. Find the capacity of the cuboid

Capacity = 

litres

litres

0.06litres

Below is a cuboid

3cm

4cm

L=5cm

**Note**;

Apply area and perimeter on a cube / cuboid i.e.

Find the area or perimeter of the shaded part.

A rectangular tank has length 10cm, 80cm wide and it is 30cm high

1. Find the volume of the tank

Volume = Length x Width x Height

= 10cm x 80cm x 30cm

=800cm2 x 30cm

**= 24000cm3**

1. Find the capacity of the tank

Capacity = 

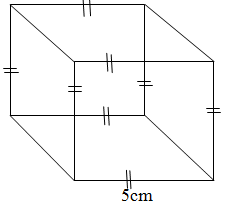
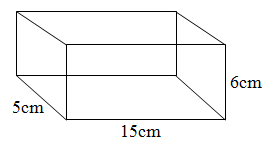
1000cm3 = 1L

24000cm 3 = 

**24litres**

**Activity**

1. Workout the volume and capacity of the tank below

****

30cm

50cm

40cm

20cm

1. A water tank has a length of 15cm, 20cm wide and it is 40cm high
2. Find its volume in cc.
3. Workout the capacity of the tank in litres
4. Find the capacity of the tank whose length is 100cm, 80cm wide and 60cm high.

**Topic : integers**

**Subtopic : Inverse**

**Content : Additive inverse**

They are the opposite of the integers

**Note:**

Any integer added to its inverse gives the zero as a result.

Find the inverse of +2

Let the inverse be w.

**+**2 + w = 0

2 - **+**2 + w = 0 – 2

**W = -2**

Find the inverse of **-**15

Let the inverse be y

y + **-**15 = -0

y + **-**15 + 15 = 0 + 15

y + 0 = 15

**y = 15**

Finding the inverse on the number line

**Question**

What is the additive inverse of -3? D:\CORNERSTONE 2018\all drawings others\number line 1.PNG

-3 +3

**The additive inverse of -3 is +3.**

**Activity**

1. Use unknowns to find the additive inverse of the following
2. -6 d) – 150
3. +9 e) + 100
4. – 20 f) +15
5. Use a number line to find the inverse of the following integers
6. -2
7. + 6
8. +4

**Topic : integers**

**Subtopic : Ordering integers**

**Content : Arranging integers in ascending or descending orders**

Integers on the right are bigger than integers on the left when on a number line

1. Arrange -4, +3, 4, 0, -5, +6, in ascending order

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From smallest: -5, -4, 0, +3, +4, +6

2. Arrange +5, -6, 3, -2, +2, 0, and -1 in descending order

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From biggest: +5, +3, +2, 0, -1, -2, -6

**Activity:**

1. Arrange the following integers in ascending order

a) +3, 0, -3, +6, -4, +1

b) -6, -5, +2, -5, -3

2. Arrange the following integers in descending order

a) +1, -3, +6, 0, -4 and -5

b) -3, +2, -5, -4, and +1

**Topic : Integers**

**Subtopic : Comparing integers**

**Content : Comparing integers using; , or**

An integer on the right if greater than an integer on the left, while an integer on the left is less than an integer on the right when shown on the number line

Use , or complete the statements below correctly

1. -5 +2

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1. +1 -3

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1. -6 0

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**Activity:**

Use , or complete the statements below correctly

1. +3 -3
2. -4 +1
3. -3 -5
4. +5 +2
5. +1 -6
6. -4 -1

**Topic : Integers**

**Subtopic : Addition of integers**

**Content : Addition of integers using a number line**

Add: +2++3

+3

D:\CORNERSTONE 2018\all drawings others\number line 1.PNG +2

+5

**+2 + +3 = +5**

Add: -2+-3

-4

D:\CORNERSTONE 2018\all drawings others\number line 1.PNG -2

-6

**-2 + -4 = -6**

**Activity**

Workout the following using a number line

1. +2++4 4. -7+-2 7. +5++2
2. +3++5 5. -1+-4 8. -6+-2
3. +2++1 6. -4+-3 9. -2+-3

**Topic : Integers**

**Subtopic : Subtraction of integers**

**Content : Subtraction of integers using a number line**

Note:

* All integers begin from the same point.
* The answer is obtained from the distance by the arrow from the second integer to the first.

Work out: +2 - +4

+4

D:\CORNERSTONE 2018\all drawings others\number line 1.PNG +2

-6

**+2 - +4 = -2**

**Method II**

Let us label the integers A and B.

**+**2 +4

A B

Subtraction mean backwards. So move from **+**4**+**2 on the number line.

B to A

D:\CORNERSTONE 2018\all drawings others\number line 1.PNG A B

-2

**+2 +4 = -2**

**Activity**

Subtract the following using labeling method

1. **+**3 - **+**5 f) **-**6 - **-**3
2. **+**6 - **+**1
3. **-**7 - **+**1
4. **-**5 - **+**4
5. **+**3 - **+**4

**Topic** : Integers

**Subtopic** : Addition and subtraction

**Content** : Addition and subtraction of Integers without a number line

Addition and subtraction without using a number line

1. Add: **+**2 **+**5

(+2) (+5)

+2 5

+ve + + + + + + + +5

-ve

**+2 +5 = +7**

1. Subtract: **+**3**+**7

(+3) (+7)

+3 7

+ve + + +

-ve - - - - - - - -4

**+2 +7 = -4**

**Note;**

* When the same signs (- -) they multiply to give a positive
* Different signs in the middle multiply to give a negative.

Thus;

- X - = +

+ x + = +

- x + = -

+ x - = -

**Activity**

Workout the following without using a number line

1. +3 - +4
2. -4 - -4
3. -6 + +6
4. +5 - +4
5. +3 - +2
6. -4 - +2
7. -6 - -4
8. +10 - -6

**Topic** : Integers

**Subtopic** : Multiplication of integers

**Content** : Multiplication of integers using a number line

**Note:**

+ **x** + = +

- **x** - = +

- **x** + = -

+ **x** - = -

**Multiplication of integers**

**Examples**

1. Multiply : 2 x **+**2

2 x **+**2 means two groups of **+**2

**+**2 + **+** 2

= **+**4

Using a number line

+2 +2

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+4

+4

**2 x +2 = +4**

1. Workout 3 x -4 using a number line

3 x -4 means 3 laps of 4 steps to the negative side

-4 -4 -4

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**- 13 -12 -11**

-12

**3 x -4 = -12**

**Activity:**

Multiply the following

1. 2 x -5
2. 3 x +4
3. 3 x -2
4. 4 x -2

Use a number line to show the following multiplication

1. 3 x -2
2. 2 x -6
3. 2 x +5
4. 3 x -4
5. 4 x -2

**Topic : Integers**

**Subtopic : Application of integers**

**Content : Application of integers**

Jack made a loss of sh. 80,000 on the first day and a profit of sh. 120,000 on the second day. What did he end up with?

**Solution**

Sh. 80,000 + sh. 120,000

= sh. 40,000

**Exercise**

1. The temperature of the baby rose from 370c by 20c. What was the final temperature of the baby?
2. The temperature of water dropped by 60c from 800c. Find the final temperature of water.
3. A canteen attendant made a loss of sh. 28000 and another loss of sh. 17000 later. Find the total loss he incurred.
4. Buyoga net ball team had 13 goals for and 8 goals against. Find the difference of their goal.
5. A trade made a profit of sh. 430,000 in May. In June she made a loss of sh. 280,000. What did she end up with?

**Topical test**

1. Which integer is seven steps to the ascending of -5?
2. Arrange the following integers in ascending order.
3. +5, 0, -2, +1
4. -3, 8, 4, -7
5. 9, -8, 0, -2, 3
6. Without using a number line, workout;
7. + 16 + + 18
8. – 4 + -7
9. -8 - +5
10. +9 + -13

Workout the following as integers

1. We got 9 points for and 12 points against
2. A gain of sh. 7000 followed by a loss of sh. 11000
3. A score of 6 points against and 4 points for
4. Below is a number line, state the integers represented by the arrows

a

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b c

a\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which letter is to the left of the other, by how much?

D:\CORNERSTONE 2018\all drawings others\number line 1.PNG **W X**

1. Use the symbols >, < or = to compare the following
2. -8 \_\_\_\_\_\_\_-2
3. 6 \_\_\_\_\_\_\_\_ -10
4. +17 \_\_\_\_\_\_\_ -15
5. -6\_\_\_\_\_\_\_\_\_\_6
6. Given that x > -4. List all the negative members of x.
7. What is the universe of -8?
8. Workout +6 + +6
9. Multiply 3 x -6
10. What integer is 6 steps left of 4?
11. Workout -6 - +4 using a number line below

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**END**

**Topic : Algebra**

**Subtopic : Forming algebraic expression**

**Content : Forming algebraic expression**

Forming algebraic expressions

1. Four more than a number

(a + 4)

1. x less than 12

12 – x

1. Subtract 2 from a number

Let the number be y.

y – 2

1. Double the sum of 2 and 4

(4 + 2) x 2

2 (4 + 2)

**Activity**

1. A number multiplied by three gives 18.
2. 10 less than a number is the same as 3.
3. Add nine to a number, the result is fourteen.
4. Sum 2x , x and 12 gives 30
5. When a number is divided by 3 and 4 is added to it, the result is 10.

**Topic : Algebra**

**Subtopic : Collecting the like terms**

**Content : Simplifying like terms**

4 boys + 3boys - 5 boys

4boys + 3boys – 5boys

7boys – 5boys

**= 2boys**

A father harvest 2 apples, 1 apple and finally 7 apples. How many apples did the farmer harvest altogether?

2apples + 1 apple + 7 apples

3 apples + 7 apples

= 10apples

**Therefore; 10 apples were harvested.**

**Activity**

Workout algebraically using letters instead of words

1. 22 houses - 12 houses
2. 1 apple + 2 apples + 3 apples
3. 12 pots + 8 pots – 10 pots
4. Three boys have 3 books, 5 books and 6 books respectively. How many books do they have altogether?
5. Collect the like terms

2p + 4p – 1p

1. A + 2a
2. 4w – 2p + 6w + 5p
3. t – 6t + 8t

**Topic : Algebra**

**Subtopic : Substitution**

**Content : Substitution**

To substitute means to replace or change

**Examples**

Given that; z=2 and y = 4. Find the value of

1. z + y
2. zy = z x y

2 x 4

**= 8**

1. y ÷z

4 ÷ 2

**= 2**

2 + 4

**= 6**

**Activity**

1. If a = 2, b = 3 and c = 4. Find the value of;
2. a+ b + c
3. abc
4. 5c + 4b
5. 8a – 2b
6. Given that; P = 4, Q = 6 and R = 8
7. If b = c = 6, and f = 9. Find the value of;
8. bf
9. cb + f
10. 

Evaluate the following;

1. Q + R
2. 
3. 3P + R
4. 

**Topic : Algebra**

**Subtopic : Solving equation**

**Content : Solving equations with addition**

**Note:** Equations with addition are solved by subtraction

1. Solve for x;

x + 4 = 7

x + 4 – 4 = 7 – 4

**x = 3**

1. Find the value of P.

3. Solve: 7 + k = 9

7 – 7 + k = 9 – 7

**K = 2**

P + 6 = 13

P + 6 – 6 = 13 – 6

**P = 7**

**Activity**

Workout the value of the unknowns

1. n + 8 = 12
2. k + 4 = 9
3. y + 8 = 17
4. 5 + m = 10
5. 9 + k = 17
6. n + 7 = 14
7. p + 18 = 24
8. t + 24 = 36
9. 30 + g = 50

**Topic : Algebra**

**Subtopic : Solving equations**

**Content : Solving equation with subtraction**

**Note:** Equations with subtraction are solved by addition

Find the value of the unknown

1. n - 8 = 12

n - 8 + 8 = 12 + 8

n + 0 = 20

**n = 20**

1. b – 48 = 18

b - 48 + 48 = 18 + 48

b + 0 = 66

**b = 66**

**Activity**

1. Solve the equation
2. n – 8 = 3
3. c – 18 = 11
4. b – 14 = 11
5. p – 22 = 44
6. d – 48 = 24
7. Matsika used sh. 550 and remained with sh. 450 of his pocket money. How much money did he have?
8. A teacher marked 15 pupils absent and 35 pupils present. How many pupils were in class?
9. Solve for P

P – 34 = 26

**Topic : Algebra**

**Subtopic : Solving equations**

**Content : Solving equations multiplication**

**Note:** Equations with multiplication are solved by division

1. Solve for a

5a = 20

 = 

**a = 4**

1. Solve for p

10p = 180

 = 

**p = 18**

2p + p = 18

3p = 18

 = 

**p = 6**

**Activity**

Solve for the unknowns

1. 3y = 18
2. 6y – 48
3. 2y = 48
4. 12r = 60
5. 8n = 72
6. 4x = 16
7. 3x = 24
8. 3x = 9
9. 9p = 18
10. 5k = 30
11. 8n = 56
12. 5n = 25

**Topic : Algebra**

**Subtopic : Forming and solving equations**

**Content : Forming and solving the equations**

1. When 3 is subtracted from a number, the answer is 10. What is the number?

**Solution**

Let the number be h

h – 3 = 10

h – 3 + 3 = 10 + 3

h + 0 = 13

h = 13

**Therefore; the number is 13**

1. In a class, 12 pupils are absent and 72 pupils are present. How many pupils are in the class?

Let the total number of pupils be r.

r - 12 = 72

r – 12 + 12 = 72 + 12

r + 0 = 84

r = 84

**Therefore the class has 84 pupils.**

**Activity**

1. A woman sold 5 of her hens and remained with 6. How many hens did she have?
2. By paying sh. 1500 a man cleared part of his debt and had sh. 3,300 still to pay. What was the full debt?
3. A teacher marked 24 pupils present and 9 pupils absent. How many pupils are in class?
4. I think of a number, add 4 to it and the result is 13. Find the number.
5. What number when subtracted from 12 gives the difference of 13?
6. Mugerwa loss 15 cows. How many cows did he have in the kraal at first?
7. Jack bought tomatoes from the market and found out that 36 of them were rotten and only 104 were good. How many tomatoes did he buy?
8. What number when added to 18 gives a sum of 22?
9. I think of a number, add 9 to it, the answer is 13. What is the number?
10. Subtract 6 from a number. If the answer is 4, what is the number?

**Topic : Algebra**

**Subtopic : solving equations**

**Content : More on solving equations**

1. Solve for a

2a + 5 = 15

2a + 5 – 5 = 15 – 5

21 + 0 = 10

 = 

**a = 5**

1. Find the value of y: 6y – 5 = 19 3. Solve for m: 2m + 1 + 3m = 16

6y – 5 + 5 = 19 + 5

6y = 24

 = 

**y = 4**

**Activity**

1. Larok multiplied a number by 5 and added 4 to it. His result was 24. Find the number.
2. Find the value of r. 2r – 6 = 8
3. Workout the value of y: 4y – 8 = 12
4. 4y – 8 = 2y. Find the value of y
5. Solve for a: 4a + 2a + 5 = 23
6. 3x + 2 = 20, find the value of x.
7. Solve for a: a + 2a + 1 = 7
8. Solve for p: p + 7 + 4p = 27
9. 3n + 1 = 10. Find the value of n.
10. Three children received 2p, 3p and sh. 500. If they all got sh. 1500. Find how much the first got.

**Topic : Algebra**

**Subtopic : Solving equations**

**Content : Solving equations involving fractions**

Solve for x:

 = 4

3 x  =  x 3

**x = 12**

Solve for r

 = 4

3 x  = 4 x 3

2r = 12

 = 

**r = 6**

**Activity:**

Find the value of the unknowns

1.  = 9
2.  = 9
3.  = 6
4.  = 6
5.  = 8
6. What number when divided by 9 gives 21?
7. 3 boys shared x exercise books. How many books did they share if each boy got 12 books?
8. A father divided some money between two children and each got sh 150. How much did he give out?
9. Solve for x ;  = 21
10. Workout the value of m if m ÷ 8 =.

**Topic : Algebra**

**Subtopic : Solving equations involving square**

**Content : Solving equations involving squares**

Find the value of f if f2 = 25

F2 = 25

5 25

5 1

f2 = 25

f 5 5

**f = 5**

 =  2 144

 =  2 72

W = 2 x 2 x 3 2 36

W = 4 x 3 2 18

W = 12 3 9

3 3

**1**

**Activity:**

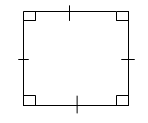
Find the value of the unknowns

1. r2 = 16 6. g2 = 9
2. x 2 = 49 7. d2 = 121
3. p2 = 64 8. h2 = 225
4. w2 = 100 9. a2 = 81
5. b2 = 169 10. y2 = 4

**Topic** : Algebra

**Subtopic** : Finding the sides of a square

**Content** : **Finding the sides of a square using square roots**

1. The area of a square is 100m2. Find the sides of the square.

Area = S x S

100m2= S S

100m2 = S2

(2 x 2) x ( 5 x 5) = S

2x5 = S

**S 10m**

**S= 10M**

2 x 5 S

(2x2) x (5x5) S2

2 100

2 50

5 25

5 5

1

A = 100m2

1. A square garden has an area of 64m2.
2. Find the length of each side

Area = S x S

64m2= S S

64m2 = S2

(2 x 2) x ( 2 x 2 ) x ( 2 x 2 ) = S2

2x2x2 = S

**S 8m**

**S= 10M**

2 x 5 S

(2x2) x (5x5) S2

2 64

2 32

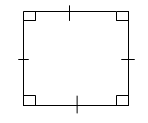
2 16

2 8

2 4

2 2

1



A = 64m2

1. Find the perimeter of the garden

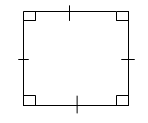
Perimeter = 4S

= 4 x 8m

**= 32m**

**Activity**

1. What is the sides of the square whose area is 16cm2?
2. The area of a square is 25m2. Find the size of one side
3. Find one side of a square whose area is 81cm2.
4. A square garden has an area of 36m2. Find its perimeter.
5. What is the perimeter of a square whose area is 64cm2.
6. A square table mat has an area of 225cm2. Find the length of each side.
7. Workout the total distance around a square whose area is 121m2.
8. Find the perimeter of the figure below



Area = 100m2

**Topic : Algebra**

**Subtopic : Finding the sides of a square or rectangle with perimeter**

**Content : Finding the sides of a square using perimeters**

A square has a perimeter of 36cm. Find the length of the square

P = 4S

36cm = 4S

cm = 

**S =9cm**

Below is a rectangle. Its perimeter is 9cm. Find the width

L + W + L + W = P

P = 2 (L + W )

18cm = 2 (5cm + W)

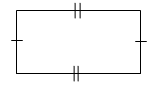
18cm = 10cm + 2W

18cm – 10cm = 10cm – 10cm + 2W

8cm = 0 + 2W

 = 

**W =4cm**

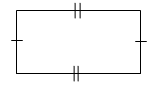


W P = 18cm

5cm

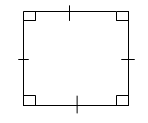
**Activity:**

Find the missing side of each figure

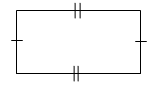


W P = 24cm

8cm

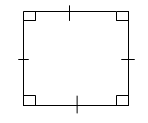


L P = 40cm



W P = 20cm

7cm



P = 28cm

K cm

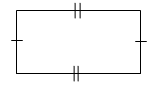
1. Find the length of a rectangle whose perimeter is 20cm and width 4cm.
2. Workout the sides of a square with a perimeter 48cm

**Topic : Algebra**

**Subtopic : Finding the sides of a square or rectangle with perimeter**

**Content : Finding the sides of a rectangle using perimeters**

The area of a rectangle is 32cm2. If its length is 8cm, find its width



Area = L x W

32cm2 = 8cm x W

 = 

**4cm = 4**

The width is 4cm

A = 32cm2

W

**8cm**

**Activity**

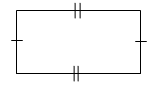
1. The area of a rectangle is 56cm2. The length is 8cm. Find its width.
2. A rectangular figure has its area as 24cm2. Its width is 4cm. Find its length.
3. The area of a rectangle is 12cm2. If its length is 4cm, find its width.
4. Find the width of a rectangle whose area is 35m and length 7m.

**Note;** More in MK P.5 page 286.

**Topic : Algebra**

**Subtopic : more on the sides of a rectangle**

**Content : Finding sides, area and perimeter of a rectangle**

The figure below is a rectangle. Study it carefully

Pcm

2p + 3

1. Find the value of p

2p + 3 = 7

2p + 3 – 3 = 7 – 3

2p + 0 = 4

 =

**p = 2**

1. Find its perimeter

Actual length Actual width P = 2 ( L+W)

2p + 3 but P = 2cm P cm but P = 2cm P = 2 (7 + 2)cm

2 x 2 + 3 = 2cm P = 2 x 9cm

4 + 3 p = 18cm

**= 7cm**

1. Workout its area

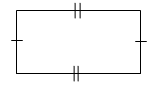
Area = L x W

7cm x 2cm

**= 14cm2**

**Activity:**

Study the figure below

 14cm

Rectangle

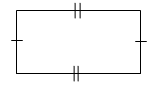
2p

3p + 5cm

1. Find the value of P
2. Find the perimeter of the rectangle
3. Workout its area

2. Below is a rectangle

(2p + 2) cm



P + 2

10 cm

1. Find the value of p
2. Find the actual length and width
3. Workout the perimeter of the rectangle
4. What is its area?

**Topic : Algebra**

**Subtopic : Finding the missing sides when volume is given**

**Content : Finding the missing sides on a cuboid using volume**

The volume of a cuboid is 60cm3. If its length is 5cm and width 4cm, find its height.

4cm

Volume = L x W x H

60cm3 = 5cm x 4cm x H

60cm3 = 20cm2 x H

 = 

**3cm = H**

**The height of a cuboid is 3cm**

5cm

4cm

h

**44**

**Activity**

Form the equation and solve for the unknown

1. The volume of a box is 24cm3. Its length is 4cm, width 3cm. Find its height.
2. Find the width of a box with a length 6cm, height 5cm and volume of 120cm3.
3. The volume of a cuboid is 72cm3. Its width is 4cm and height 3cm. Find its length.
4. The volume of a box is 49cm3. Its length and width are 4cm and 3cm respectively. Find its height
5. The volume of a cuboid is 100cm3. Its length is 5cm, height 5cm. Find the width.

**Topical test**

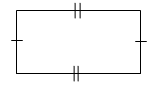
*Attempt all questions*

1. Simplify: 2a + 3b + a + 2b
2. Solve for x; 2x + 3x = 30
3. What is the value of p if P2 =36.
4. Solve 5p + 4p – 7p = 16
5. Simplify; 6m – 2n + 5n – 3m
6. Workout x + x – x + x + x
7. Find the value of p; 2p – 10 = 4
8. Find the value of  if a = 2, b = 4 and c = 3
9. Solve; x + 2x + 3x = 48
10. Three boys weigh 90kg. If their weight are 2xkg, xkg and 3xkg, what is the value of x?
11. The length of a rectangular garden is 10 metres. If its area is 150 square metres, find its width.
12. Solve for y and x;

 =  = 

1. Find the value of x. 9x = 108
2. Solve for p; p2 + 2 = 27
3. A man is 4 time as old as his daughter. If he isd x years old and their total age is 60 years, how old is each?
4. Find the value of p in centimeters.

5p-3cnm



3p+5cm

1. Solve for c:- 4x – 2 + x = 8
2. Solve :  = 9
3. Find the height of a cuboid whose volume is length 8cm and width 2cm.
4. Kaija has 4 time as many goats at Paul. If they both have 40 goats, how many goats does each have?