$$1. \underline{40} = \underline{4} = \underline{4}$$

2.
$$(\sqrt{m} + 7)^2 = 4^2$$

 $m + 7 = 4 \times 4$
 $m + 7 = 16$
 $m + 7 - 7 = 16 - 7$
 $m = 9$

3.
$$(3 \times \frac{1}{10}) + (8 \times 10)$$
 4. $\underline{2} \times \underline{3}$
= 0.3 + 80 $\underline{3}$ 1
= 80.3 = 2

5.
$$p + 70^{\circ} = 180^{\circ}$$

 $p + 70^{\circ} - 70^{\circ} = 180^{\circ} - 70^{\circ}$
 $p = 110^{\circ}$
6. $V = S^{3}$

Capacity =
$$\frac{10_{cm} \times 10_{cm} \times 10_{cm}}{100_{cm}^3}$$
$$= 1 \text{ litre.}$$

7. 17, 12, 8, 5, 3, 2

11. 2 + 5 (finite 6)
= 7 (finite 6)
7 ÷ 6 = 1 rem. 1
= 1 (finite 6)
12.

0 2 frea 1 | 1

rainfall

Mode = 3
13. A =
$$\pi r^2$$

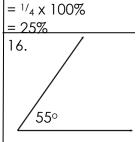
= $^{22/_7}$ x 7cm x 7cm
= 154 cm²

4 5 6

15.
$$1 - \frac{3}{4}$$

$$= \frac{1}{4}$$

Percentage failure

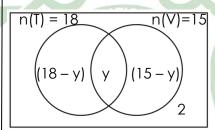


17. 6 twenty thousand $= 6 \times Shs20,000$ = Shs120.000

18. Distributive Property

= 11years_

20. 2 five – fives and 3 fifths $= (2 \times 5 \times 5) + \frac{1}{5}$ $= 50^{3/5}$ 21a). $n(\Sigma) = 30$



b).
$$18 - y + y + 15 - y + 2 = 30$$

 $18 + 15 + 2 - y = 30$
 $30 - y = 30$
 $35 - 30 = y$
 $y = 5$

22. The largest counting number being m Middle number = m - 1,

Smallest number =
$$m - 2$$

 $m + m - 1 + m - 2 = 18$
 $3m + 3 + 3 = 18 + 3$
 $\frac{3m}{3} = \frac{21}{3}$
 $m = 7$

The smallest number = m - 2

= 7 - 2So, the smallest number = 5 23a). $L \times W \times H = V$ $20cm \times p \times 8cm = 480cm^3$ 160p $= 480 cm^3$ 160 160

```
P = 3cm.
```

b). Base area

 $= L \times W$

 $= 20 \text{cm} \times 3 \text{cm}$

 $= 60 cm^2$

24a). No. of airls $= \frac{3}{5} \times 60$ = 33 girls.

b). No. of boys

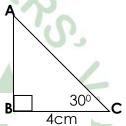
= 60 - 36= 24 boys

Difference in number

= 60 - 24

= 12 more girls than boys.

25a) sketch



Accurate diagram: Must bear, all the information with accurate measurements.

b). AC = 4.6 cm

26. Let Harrison's age be h

Alinda's age = h + 5
h + h + 5 = 37
2h + 5 = 37
2h + 5 - 5 = 37 - 5

$$\frac{2h}{2}$$
 = $\frac{32}{2}$
h = 16

Alinda's age in 15 years time.

27. **Value of** 6 **in** 39462

Value of 6 in 39462

$$= 6 \times 10$$

= 60

 $Product = 30,000 \times 60$

28a.) -2 + 5 = +3

```
But 32 ÷ 7 4 rem. 4
3 - 4 (finite 7)
= (3 + 7) - 4(finite 7)
= 10 - 4 (finite)
= 6 \text{ (finite 7)}
The day was Saturday.
29.a). 48 \text{ months} = 48 \div 12
                     = 4 years
P \times R \times T
  = Shs300,000 \times \frac{5}{1000} \times 4
  = Shs60,000
b). Amount
   = principal + interest
   = Shs300,000 + Shs60,000
   = Shs360.000
30a). Let the sector angle for
       failures be p.
p + 120^{\circ} + 150^{\circ} + 60^{\circ} = 360^{\circ}
p + 330°
                    = 360°
p + 330^{\circ} - 330^{\circ} = 360^{\circ} - 330^{\circ}
                   = 300
b). Number of candidates who
    passed in division one.
= <u>60</u>° x 72
  360°
= 12 candidates.
c). Difference in angles
= 150° - 120°
= 30°
Difference in No. of candidates
= 30^{\circ} \times 72
   <u>360°</u>
= 6 more candidates in Div. 1
  than Div.3
31a). 1km = 1000m
     36km = 36 \times 1000m
            = 36,000 m
        1hr = 3600 seconds
                                    Engage
             = 36,000m
 In m/s
               3600 seconds
            = 10 \text{ m/s}
b). Time taken
     11:00<sub>am</sub>
   - 9:00<sub>am</sub>
     2:00
\underline{\text{Time taken}} = 2 \text{ hours.}
Average speed
= 200 km
```

2hrs

= 100 km/hr32a). 253 = 1123 b). $3456 \div 10 = 345.6$ $345.6 \div 10 = 34.56$ $34.56 \div 10 = 3.456$ 4.356 x 10³ ACHERS. Code - RM 21