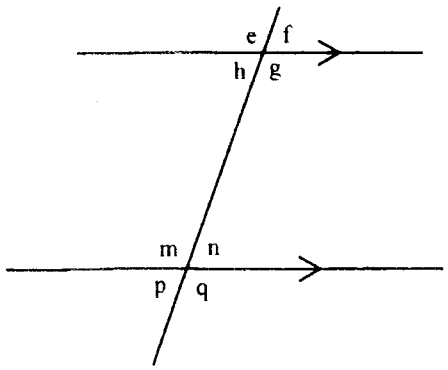
18. The figure below shows angles formed by a pair of parallel lines and a transversal.



In which group below, are each of the angles equal to n?

A p, g, f
B p, m, f
C p, q, f
D p, h, f

19. What is the value of $\sqrt{4.2849}$?

A 0.207
B 2.07
C 2.7
D 207

20. In a certain school, the fractions of boys in classes 5, 6, 7 and 8 are as follows: Class 5 is $\frac{12}{16}$, Class 6 is $\frac{13}{26}$, Class 7 is $\frac{10}{25}$ and Class 8 is $\frac{10}{18}$.

Which class has the least number of boys if all the classes have the same number of pupils?

A Class 5
B Class 6
C Class 7
D Class 8

21. What is the value of x in the equation $\frac{2x-3}{3} + 2x = 6$?

A $1\frac{1}{8}$
B $5\frac{7}{8}$
C $1\frac{7}{8}$
D $2\frac{5}{8}$

Working Space

22. The table below shows the number of vehicles that passed near a school in one week. The average number of vehicles per day was 116. The number of vehicles that passed near the school on Friday is not shown.

MON	TUES	WED	THUR	FRI	SAT	SUN
125	75	112	100	.....	148	112

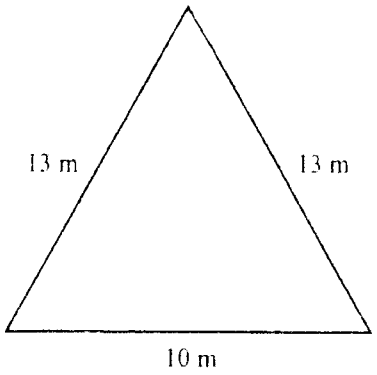
How many more vehicles passed near the school on Friday than on Tuesday?

A 595
B 215
C 140
D 65

23. A small aircraft took 6 hours 30 minutes to travel from Pretoria to Mombasa. It reached Mombasa at 04 00 h on Wednesday. At what time and day did it depart from Pretoria?

A 09 30 h on Wednesday
B 09 30 h on Tuesday
C 21 30 h on Wednesday
D 21 30 h on Tuesday

24. The diagram below represents a flower garden.

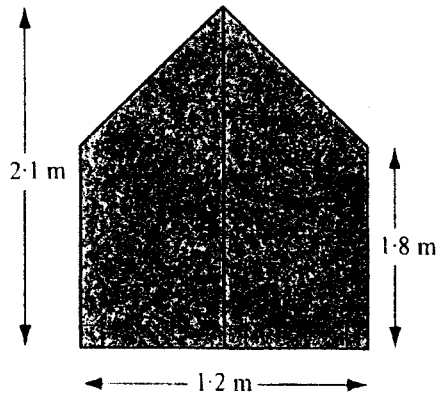


What is the area of the flower garden in m^2?

A 36
B 60
C 65
D 120

Working Space

25. The diagram below represents a door which was painted on the outside.



What was the area painted, in square metres?

A 1.17
B 2.16
C 2.34
D 2.52

26. Which one of the following groups of measurements represents length of sides of a right angled triangle?

A 7 cm, 12 cm, 13 cm
B 5 cm, 4 cm, 25 cm
C 3 cm, 4 cm, 6 cm
D 12 cm, 16 cm, 20 cm

27. A cylindrical container has an internal radius of 7 cm and a height of 5 cm. What is its capacity in litres? (Take $\pi = \frac{22}{7}$).

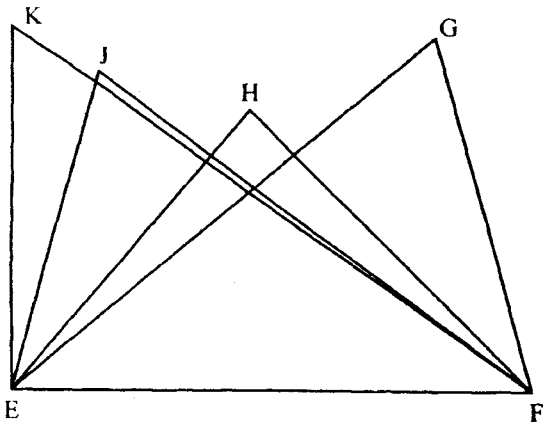
A 0·77
B 7·7
C 77
D 770

28. A farmer used $\frac{1}{2}$ of her land for planting maize, $\frac{1}{5}$ for planting beans, $\frac{1}{3}$ of the remainder for grazing and the rest for horticulture. If the farmer used 10 ha for grazing, how much land does she have?

A 100 ha
B $33\frac{1}{3}$ ha
C 30 ha
D $11\frac{1}{30}$ ha

Working Space

29. Which one of the triangles below has two of its sides measuring 5 cm and 7 cm while one of its angles measures 75°?



A Triangle KEF.
B Triangle JEF.
C Triangle HEF.
D Triangle GEF.

30. In a certain company candidates **G**, **K** and **L** contested for a seat. The number of those who voted for **K** was 800, which was 0·25 of the total votes. Out of the remaining votes, **L** received 0·03 more than **G**.
How many more votes than **K** did the winning candidate get?

A 72
B 364
C 436
D 448

Working Space

Working Space

31. The table below shows the second class train fare from station M to P through station N. The pupils paid fare as children.

DESCRIPTION	SECOND CLASS		
STATION	FARE ONLY	FARE & BEDDING	ALL INCLUSIVE
M–P			
ADULT.....	1 000·00	1 275·00	2 275·00
CHILD.....	500·00	775·00	1 475·00
M–N			
ADULT.....	695·00	970·00	1 570·00
CHILD.....	350·00	625·00	1 045·00

Three teachers accompanied 45 pupils in the train. The pupils paid fare only, from station M to P. Two of the teachers paid all inclusive rate from station M to P. One teacher who alighted at station N paid for fare and bedding. How much money did they pay altogether?

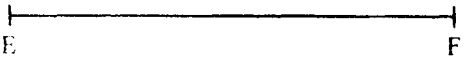
A sh 25 195
B sh 28 020
C sh 28 325
D sh 50 520

32. The hire purchase price of a cupboard was 25% more than the marked price. Karani bought the cupboard on hire purchase terms.

He paid a deposit of sh 2 000 and eight equal monthly installments of sh 650. What was the marked price of the cupboard?

A sh 4 160
B sh 5 400
C sh 5 760
D sh 9 000

33. Construct a semi-circle whose diameter EF is given below. Construct a line from E to meet the semi-circle at G such that angle FEG is 30°. Construct a line from F to meet the semi-circle at H such that angle EFH is 20°. Join points E to H, H to G and G to F.



What is the length of line GH?

A 3·0 cm
B 3·9 cm
C 5·3 cm
D 5·7 cm

34. A lorry has mass of 7·7 tonnes when loaded with 75 bags of rice. There are 33 bags each with mass of 85 kg and the rest have mass of 45 kg each. What is the mass of the lorry, in tonnes, when empty?

A 3·005
B 4·695
C 4·850
D 12·395

35. There were m men in a bus. The number of children in the bus was three times that of men but eleven more than that of women. The total number of women, men and children in the bus was 45. Which one of the equations below can be used to find the number of men that were in the bus?

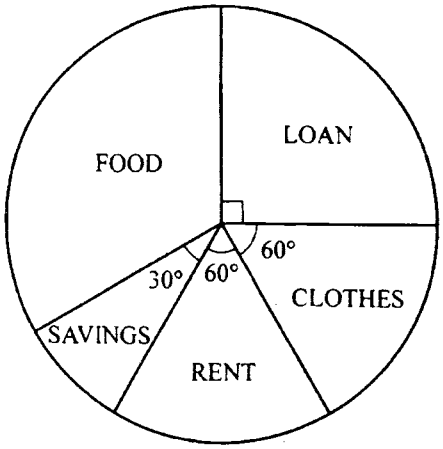
A $5m - 11 = 45$
B $4m + 11 = 45$
C $7m + 11 = 45$
D $7m - 11 = 45$

36. Four workers take 10 hours to complete a certain job. How many more workers would be hired in order that they do the same job in 2 hours?

A 20
B 24
C 16
D 1

Working Space

37. The pie-chart below shows how Kesenet spent her salary.



How much more did she spend on loan than on rent if she spent sh 4 000 on food?

A sh 5 000
B sh 3 000
C sh 2 000
D sh 1 000

38. Which **two** of the following statements are **true** about all triangles?

(i) All angles are equal.
(ii) Sum of interior angles is 180°.
(iii) One angle is 90°.
(iv) Sum of exterior angles is 360°.

A (i) and (ii)
B (i) and (iii)
C (ii) and (iv)
D (iii) and (iv)

39. There is a 25% loss when an article is sold at sh 225. At what price should it be sold in order to make a profit of 5%?

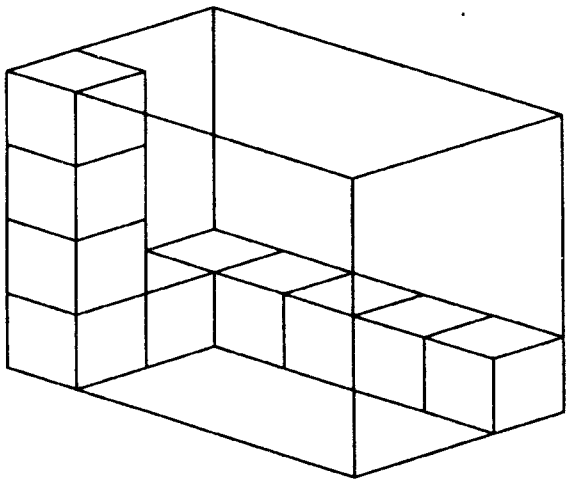
A sh 315·00
B sh 300·00
C sh 295·31
D sh 236·25

40. A playing field measured 50 m by 30 m. The measurements of the sides of the field were later increased to 80 m by 60 m. What was the percentage increase of the area of the field?

A 4 800
B 3 300
C 900
D 220

Working Space

41. How many more cubes are needed to fill the box below?

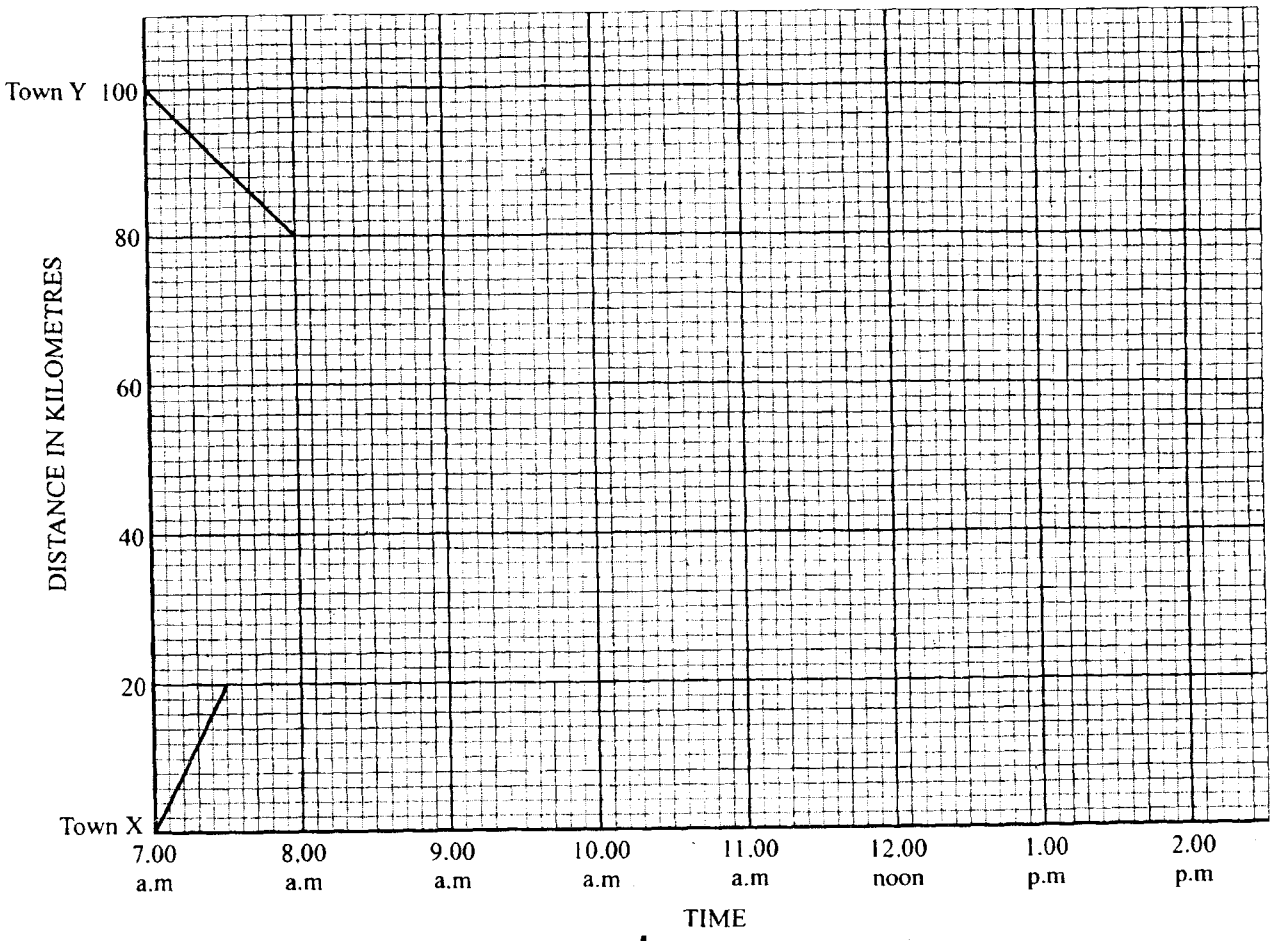


A 10
B 22
C 50
D 60

Working Space

42. The graph below shows part of the journeys made by Chebet and Keya on the same road.

Working Space



Chebet travelled from town Y to town X at a constant speed.
Keya travelled from town X to town Y. After covering 20 km he rested for 30 minutes. He then continued at an average speed of 40 km/h.
Complete the graphs of the journeys.

At what time did they meet?

A 9.00 a.m
B 8.40 a.m
C 9.10 a.m
D 8.50 a.m