TEST

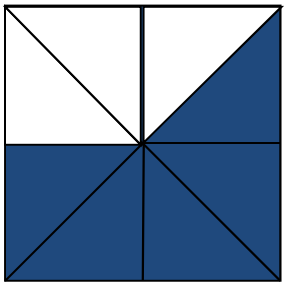
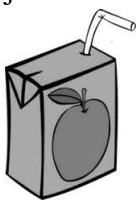
5

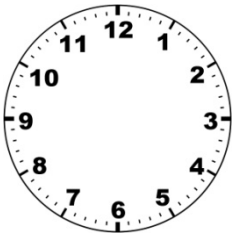
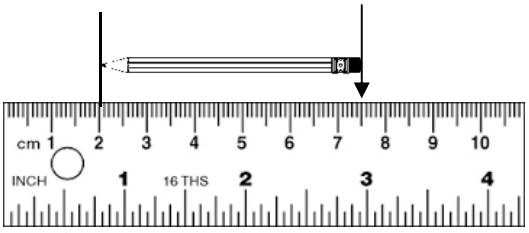
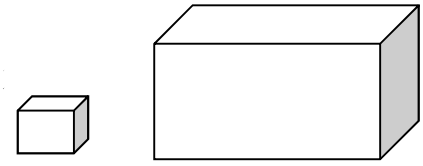
MATHEMATICS TEST 5 TIME- 75 MINUTES

SECTION 1

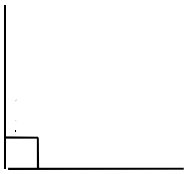
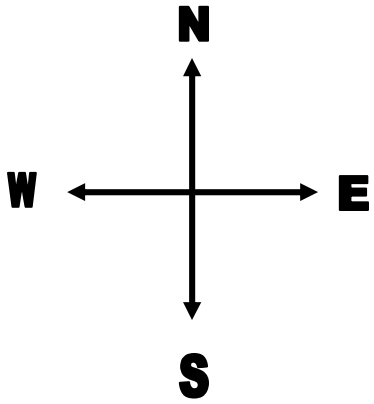
Each question is worth 1 mark. Answer ALL questions. Show ALL working in the Working Column.

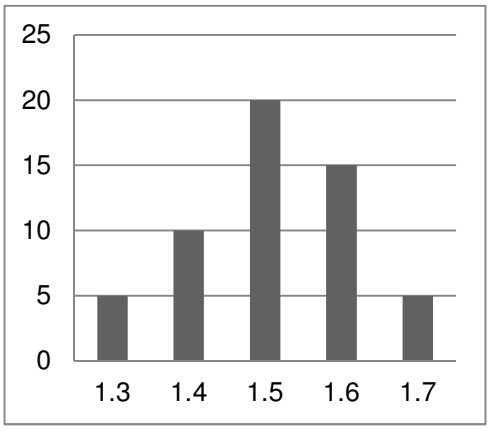
NO.	ITEMS	Working Column	Marks
1.	What is the PLACE VALUE of the digit 7 in the number 529.72? Answer: _____	**TENTHS**	
2.	Write the numeral which represents $(9\times10000)+(6\times1000)+(4\times100)+(3\times\frac{1}{100})$ Answer: _____	**96 400.03**	
3.	Express $4\frac{2}{5}$ as an IMPROPER fraction. Answer:_____	$4\frac{2}{5}=\mathbf{\frac{22}{5}}$	
4.	Convert 0.45 to a fraction in its **LOWEST** terms. Answer: _____	$\frac{45}{100}=\mathbf{\frac{9}{20}}$	
5.	What **percent** of 36 is 12? Answer:_____	$\frac{12}{36}$ x $\frac{100}{1}$ $=\mathbf{33\frac{1}{3}}$ **%**	

6.	What FRACTION of the diagram is NOT shaded?  Answer:_____	$\frac{3}{8}$	
7.	What must be added to $\sqrt{100}$ to make 10^2? Answer:_____	$\sqrt{100} = 10$ $10 + \square = 100$ $\square = 100 - 10$ $\square = 90$	
8.	A pack of juice holds 250ml.  Joe drank 40% of the juice. How many ml of juice did he drink? Answer: _____ml	Drank = $\frac{40}{100} \times \frac{250}{1}$ **= 100 ml**	

9.	**6:45 am** The clock above shows the time when Sunil got up to get ready for school. Show this time on the clock below. 		
10.	 Centimetre (cm) ruler The length of the pencil is EXACTLY _____ cm.	**5.5 cm**	
11.	 $40cm^3$ $920cm^3$ How many mini toy boxes will fill the larger toy box? Answer: _____	$\frac{920cm^3}{40\ cm^3}$ **= 23 mini boxes**	

12.	The perimeter of a Rhombus is 48cm. What is the length of ONE side? Answer: _____cm.	Perimeter of Rhombus = 48 ÷ 4 = **12cm**	
13.	All the sugar from the 3kg bag is put into smaller packets each weighing 150g.  How many smaller packets of sugar were made? Answer: _____	$\frac{3000}{150} = 20$ **20 smaller packets**	
14.	Danny bought a cell-phone for $1200.00 and sold it to make a profit of $300.00. Express the profit as a **percentage** of the cost price. Answer: _____	$\frac{300}{1200} \times \frac{100}{1}$ **= 25%**	
15.	Vendor A sells mangoes at 4 for $5.00. Vendor B sells mangoes at 5 for $6.00. Which vendor sells the mangoes at a **cheaper** price? Answer: _____	Vendor A = $ 5 ÷ 4 = $ 1.25 Vendor B = $ 6 ÷ 5 = $ 1. 20 **Vendor B sells at a cheaper price**	

16.	Name of the solid shown below:  Answer:_____	**Sphere**	
17.	Write the phrase from the box to correctly complete the sentence below. Larger Than | Smaller Than | The Same as  The angle shown is_____ 90°	**The Same As**	
18.	Gary is facing east. He made a quarter of a turn in an anticlockwise direction. What direction is he now facing?  Answer: _____	**North**	

19.	The tally chart below shows the number of boys who own fishes in each class. CLASS / NUMBER OF BOYS Std. 1 / Std. 2 / 𝍸 𝍸 II Std. 3 / 𝍸 If there were 25 boys among the three classes, how many boys owned fishes in Standard One? Answer: _____	25 – 17 = 8 **8 boys owned fishes in Standard One**	
20.	The bar chart below shows the heights of the students in Form Five in a secondary school. Students  Height in (m) How many students are shorter than 1.5m? Answer: _____	10 + 5 = **15**	

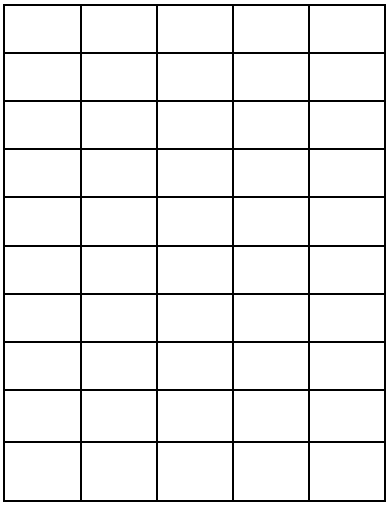
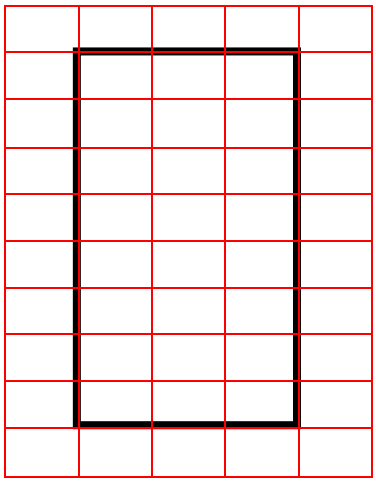
SECTION 2

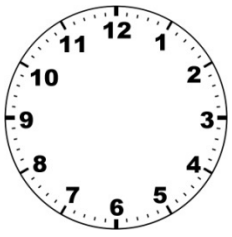
Each question is worth either 2 or 3 marks. Answer ALL questions. Show ALL working in the Working Column.

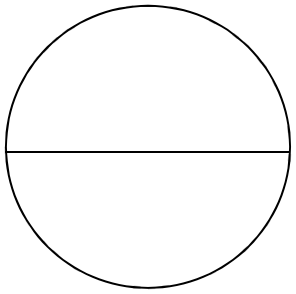
No.	Items	Working Column	Marks
21.	Samantha spent $\frac{1}{4}$ of her allowance on a snack and $\frac{3}{8}$ on school stationery. She saves the remainder. What FRACTION of her money did she save? Answer: _____ (2)	Spent $= \frac{1}{4} + \frac{3}{8}$ $= \frac{5}{8}$ $\therefore$ Saved $= \frac{8}{8} - \frac{5}{8}$ $= \frac{3}{8}$	
22.	Candice left home and cycled a distance of 2350m to Arima. She cycled a further 575m to her friend's house. What was the TOTAL distance in KILOMETRES Candice travelled? Answer: _____ (2)	2350 + 575 = 2925 **2.925 km**	
23.	A farmer planted coconut trees in a row. If the trees were planted 5 metres apart and the distance between the first and last tree is 45 metres, how many trees were planted? Answer: _____ (2)	$\frac{45}{5} = 9$ 9 + 1 =10 **10 coconut trees were planted**	

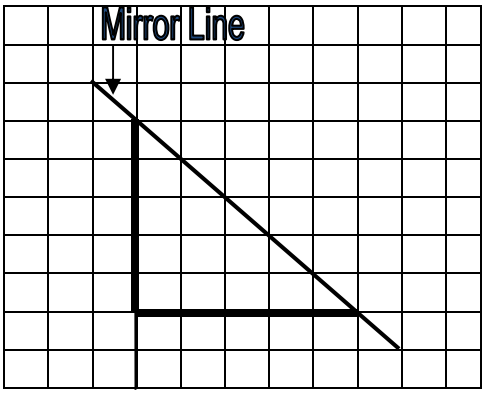
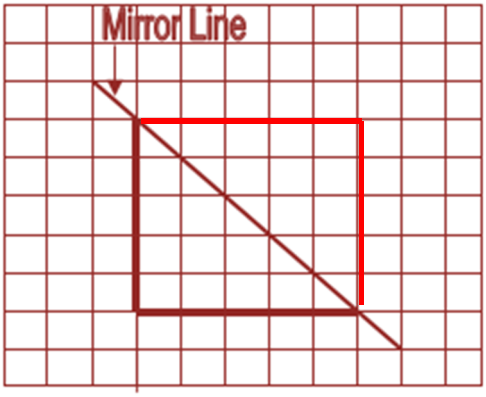
24.	A roll of string is cut into 25 pieces. Each piece is $\frac{3}{5}$ m in length. What is the TOTAL length of string on the roll? Answer: _____ (2)	$\frac{25}{1}$ X $\frac{3}{5}$ = **15m**	
25.	A tailor makes outfits (jerseys and shorts) for a football team.  He uses $\frac{4}{5}$ m of cloth to make 1 jersey and 0.75m to make 1 pair of shorts. (a) How much material is needed to make an outfit? Answer: _____m (1) (b) How much material is needed to make 11 outfits for the football team? Answer: _____ m(2)	(a) Jersey = $\frac{4}{5}$ = 0.8m Shorts = 0.75m Outfit = 0.8 + .75 = **1.55m** (b) 11 Outfits = 1.55 x 11 = **17.05m**	!

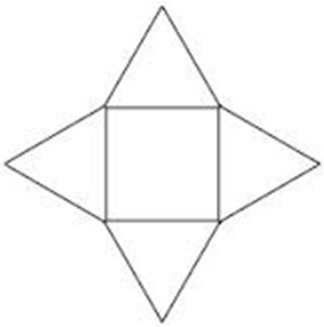
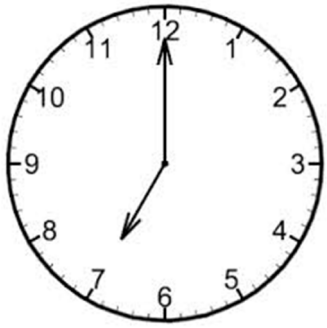
26.	Seventy- five relatives attended a family reunion. There were tables that seat either 3 or 4 persons. If there were 12 tables that seat 4 persons, how many tables were available to seat 3 persons? Answer: _____ (3)	12 x 4 = 48 Family members = 75 3 seaters = 75 – 48 = 27 ÷ 3 = **9 tables**	
27.	Matthew works for $160.00 a day. He spends $\frac{1}{8}$ of this money on lunch. (a) How much does he spend on lunch per day? Answer :$_____ (1) (b) Matthew works 5 days each week. How much of his salary is spent on lunch in 4 weeks? Answer: $ _____ (2)	(a) Lunch = $\frac{1}{8}$ x $\frac{160}{1}$ = **$20** (b) 1 day = 20 5 days = 20 x 5 1 week = $100 4 weeks = $100 x 4 = **$ 400**	
28.	$37\frac{1}{2}$% of the marbles in a container is 252. What is the total number of marbles in the container? Answer: _____(3)	$37\frac{1}{2}$ % = $\frac{75}{200}$ = $\frac{3}{8}$ $\frac{3}{8}$ = 252 1 = $\frac{252}{1}$ x $\frac{8}{3}$ = **672**	

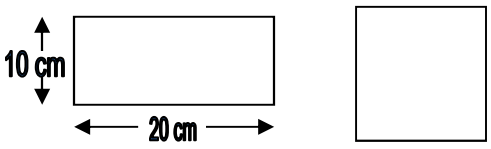
29.	The diagram below shows the cost of a watch. VAT is charged at 15%  $300 How much will a customer pay for the watch? Answer: _____(2)	Watch = 115% of $300 $\frac{115}{100} \times \frac{300}{1}$ = **$345**	
30.	Draw a rectangle on the grid such that the area of the rectangle is 24 square units and the length is 8 units.  Answer:_____(2)		

31.	 Apples are sold as shown above. **(3 for $10.00)** (a) How much will Ruan pay for 9 apples? Answer: _____(1) (b) How many apples can Sally get for $40.00? Answer: _____ (1)	(a) 3 apples = $10 1 apple = $\frac{10}{3}$ 9 apples = $\frac{10}{3}$ x $\frac{9}{1}$ = **$30** (b) $ 10 = 3 apples $1 = $\frac{3}{10}$ $40 = $\frac{3}{10}$ x $\frac{40}{1}$ = **12 apples**	
32.	A PTA meeting lasts for 2 $\frac{1}{4}$ hours. It was scheduled to start at 5:30 p.m. The meeting began 10 minutes late because of late arrival of some members. (a) Calculate the conclusion time of the meeting. Answer: _____(2) (b) 	(a) 5 : 30 2 : 15 :10 **7 : 55 pm** 	

	On the clock above, show the time when the meeting ended. (1)		
33.	The diameter of a circle is 14cm.  (a) What is the radius of the circle? Answer: _____cm.(1) (b) What distance will the circle cover if it makes two complete turns? Answer: _____cm. (2)	(a) Radius = D ÷ 2 = 14 ÷ 2 = **7cm** (b) Circumference = D x π = 14 x $\frac{22}{7}$ = 44cm 2 times = 44 x 2 = **88cm**	
34.	The rates at a Hotel are shown below. **Hotel Rates** **Adults: $500 per day Mon. - Fri.** **Children: 10 and under $250** A family of husband, wife and 2 children (ages 9 and 5 years), spent Wednesday to Friday at the Hotel. Calculate how much they paid for their stay at the Hotel.	Adults = 2 x $500 = $ 1000 /day 3 days = $ 1000 x 3 = $ 3000 Children = 2 x $ 250 = $ 500 /day 3 days = $ 500 x 3 = $ 1500 Total = $ 3000 + $ 1500 = **$ 4500**	

	Answer: _____(3)		
35.	Larry borrows $8000 for 3 years from a Bank. He pays 8% interest per year. (a) Calculate the interest. Answer: $ _____(1) (b) Calculate the TOTAL amount he has to repay the bank. Answer: $ _____(2)	(a) Simple Interest = $\frac{P \times R \times T}{100}$ $= \frac{\$8000 \times 8 \times 3}{100}$ Simple Interest = **$ 1920** (b) Total Amount = $ 8000 + $ 1920 $ 9920 **Amount = $ 9920**	
36.	Draw the new position of the triangle after it is flipped about the mirror line.  Answer:_____(2)	 	

37.	The diagram below shows the net of a solid.  (a) What is the name of the solid? Answer: _____(1) (b) How many lines of symmetry are there in the net? Answer: _____(1)	**(a) Square based pyramid** **(b) 4**	
38.	(a) What is the size of the smaller angle formed between the two hands on the face of the clock shown?  Answer: _____(1) (b) What number will the short hand point if it moved 90° in a clockwise direction? Answer_____(2)	(a) 1 space = 30^0 5 spaces = 30^0 x 5 **Smaller angle = 150^0** (b) 90^0 = 3 spaces = 7 + 3 **=10**	

39.	 The perimeter of the square is twice the perimeter of the rectangle. (a) Calculate the perimeter of the square. Answer:_____(2) (b) What will be the length of ONE side of the square? Answer: _____(1)	(a) Perimeter of rect. = 2L + 2W = (2 x 20) + (2 x 10) = 40 + 20 = 60cm ∴ Perimeter of square = 60 x 2 = **120cm** (b) Perimeter of square = 120cm Side of square = 120 ÷ 4 = **30 cm**	

40. The table below shows the number of text messages Allan sends for a week.

Day of the Week	**No. of Messages**
Monday	30
Tuesday	23
Wednesday	28
Thursday	31
Friday	28

Calculate the average number of text messages he sends per day.

Answer: _____(2)

Average number of texts = $\frac{\in}{N[n]}$

$= \frac{30 + 23 + 28 + 31 + 28}{5}$

$= \frac{140}{5}$

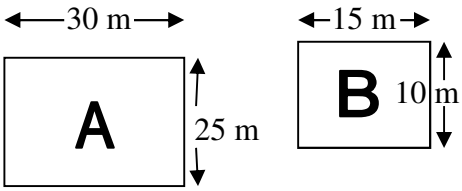
= **28 texts per day**

SECTION 3

Each question is worth 5 marks. Answer ALL questions. Show ALL working in the Working Column.

No.	Items	Working Column	Marks
41.	Allan sold 20% of his stamps from his stamp collection. He gave his friend Harry $\frac{3}{4}$ of the remainder. Allan remained with 80 stamps. (a) Calculate how many stamps Allan had at the beginning. Answer: _____(3) (b) How many stamps did Harry receive from Allan? Answer: _____(2)	(a) Remained with = 80 Sold= 20 % or $\frac{1}{5}$ Remainder = $\frac{4}{5}$ Gave Harry = $\frac{3}{4}$ x $\frac{4}{5}$ = $\frac{3}{5}$ Sold + Harry = $\frac{1}{5}$ + $\frac{3}{5}$ = $\frac{4}{5}$ Remained with = $\frac{5}{5}$ - $\frac{4}{5}$ = $\frac{1}{5}$ $\therefore \frac{1}{5}$ = 80 1 = 80 x 5 **= 400 stamps** (b) Harry = $\frac{3}{5}$ x $\frac{100}{1}$ **= 60 stamps**	

42. A gardener owned two rectangular parcels of land as shown below.



(a) What is the area of parcel B?

Answer: _____(1)

(b) How many times is parcel A larger than parcel B?

Answer: _____ (2)

(c) A plough owner was paid $250.00 to prepare parcel B. How much will he charge to plough parcel A?

Answer: _____(2)

(a) Area of Parcel B = L x W
= 15 x 10
= **250 m^2**

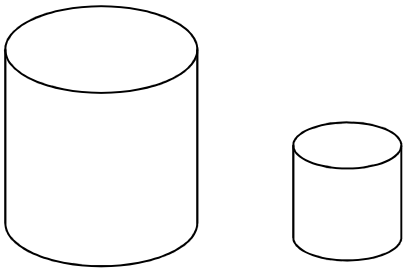
(b) Area of Parcel A = L x W
= 30 x 25
= 750 m^2

$\frac{\text{Parcel A}}{\text{Parcel B}} = \frac{750}{250}$

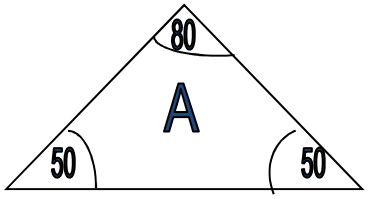
= **3 times larger**

(c) He will charge 3 times the amount that he charged for parcel B,
∴ $250 x 3
= **$ 750**

43.	The stove shown was bought by Janet.  (a) Calculate the discount given. Answer:_____(2) (b) Calculate the price after the discount. Answer: _____ (1) (c) Janet was charged 15% VAT after the discount was given. Calculate the price paid for the stove. Answer: _____ (2)	(a) Discount = 20% x $5000 $= \frac{1}{5} \times \frac{5000}{1}$ = **$ 1000** (b) After disc. = $5000 - $1000 = **$ 4000** (c) VAT = $\frac{115}{100} \times \frac{5000}{1}$ = **$5750**	

44.	The two containers below show the capacity of water in each of them.  8.5 litres 850ml (a) How many small containers of water can be filled from the large container? Answer: _____(2) (b) A student took 1 $\frac{1}{2}$ mins to fill 1 small container of water from the large container. If he began an exercise at 9:15 a.m. to fill the number of small containers at what time did he complete the exercise? Answer: _____(3)	(a) 8.5 L = 8500 ml = ~~8500~~ ^{10} ~~850~~ ^{1} = **10** small containers can be filled from the big container (b) 1 sm. container = 1.5 mins 10 sm. Containers = 1.5 x 10 = 15 mins Started = 9 : 15 Took = : 15 9 : 30 am Completed filling at **9:30 am**	

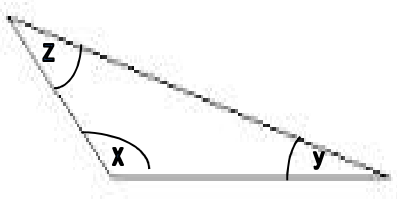
45.



(a) Write the name of the type of triangle labelled A.

Answer: _____(1)

(b)

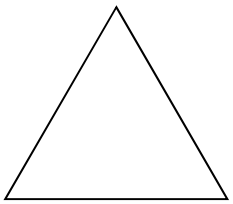


Angle x,y, and z are shown above on the triangle.

Arrange the angles in order of size starting from the SMALLEST.

Answer: _____
(2)

(a) The lengths of all sides of the triangle are equal.



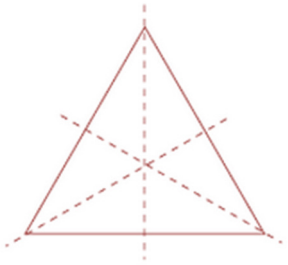
Draw ALL the lines of symmetry on the triangle.

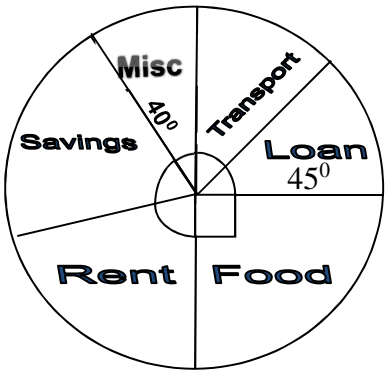
Answer: _____ (2)

(a) **ISOCELES TRIANGLE**

(b) **y z x**

(c)



46.	 This pie chart above shows the budget of Mr. Kapil's monthly salary of $7200.00 (a) What is the size of the angle that represents transport? Answer:_____(1) (b) Savings and Rent represent the same amount. Calculate the size of angle of Mr. Kapil's savings for the month. Answer:_____(2) (c) Calculate the amount of money spent on rent for the month. Answer: _____(1) (d) Circle one of the following to show the angle representing rent. 45^0, 70^0, 90^0, 40^0 Answer:_____(1)	(a) Transport = $180^0 - (90^0 + 45^0)$ $= 180^0 - 135^0$ $= 45^0$ (b) Savings $= \frac{360^0 - (180^0 + 40^0)}{2}$ $= \frac{360^0 - 220^0}{2}$ $= \frac{140}{2}$ $= \mathbf{70^0}$ (c) $\frac{70}{360} \times \frac{7200}{1}$ **=$ 1400**	
	End of Test		