TEST

18

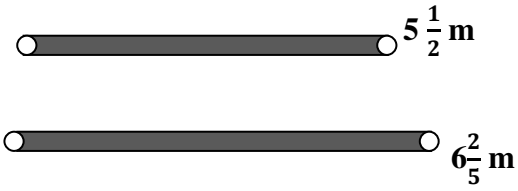
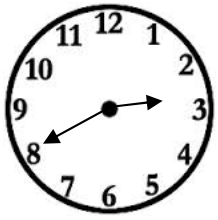
MATHEMATICS TEST 18 TIME- 75 MINUTES

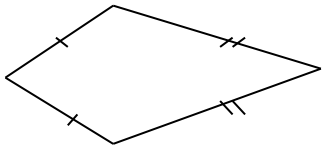
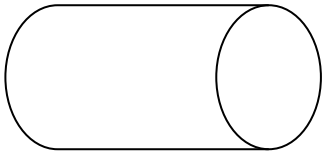
SECTION 1

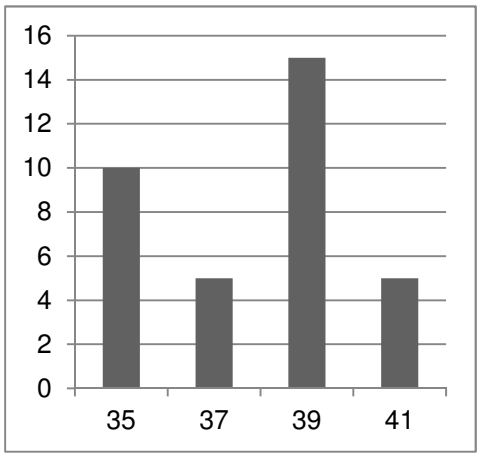
Each question is worth 1 mark. Answer ALL questions. Show ALL working in the Working Column.

No.	Items	Working Column	Mark
1.	Write three hundred and nine thousand and twenty five in numerals. Answer _____	HTh TTh Th H T O **3 0 9 9 2 5**	
2.	Approximate 7 630 to the nearest HUNDRED. Answer _____	7630 ≅ 7600 **7600**	
3.	Write the value of the underlined digit in the number 4<u>6</u>8 209. Answer _____	**60 000**	
4.	Write the number to correctly complete the expanded notation. 346479 = (3 x 100 000) + (4 x 10 000) + (6 x ☐) + (4 x 100) + (7 x 10) + (9 x1) Answer _____	**1 000**	

5.	Order these fractions from the SMALLEST to the LARGEST. 0.63 ; 0.36 ; 0.06 Answer _____	**0.06 0.36 0.63**	
6.	Complete the following statement: If $\frac{N}{7} = \frac{24}{28}$, then N = Answer _____	N= 24 ÷ 4 **N = 6**	
7.	What is the remainder when 452 is divided by 3? Answer _____	452 ÷ 3 = 150 r.2 **Remainder = 2**	
8.	$6 \div \frac{2}{3} =$ Answer _____	$\frac{6}{1} \times \frac{3}{2}$ **= 9**	
9.	Rachael ran 2.5 km. Jerome ran 1.35 km MORE than Rachael. What distance in kilometres did Jerome run? Answer _____km	Jerome = 2.5 + 1.35 **= 3.85km**	
10.	Jodi left home at 9:20a.m and reached the cinema 1hr and 30minutes later. At what time did Jodi arrive at the cinema? Answer _____	9 : 2 0 + 1 : 3 0 **10:5 0 a.m**	

11.	Mr. Jason bought a watch for $295.00 and sold it for $425.00. Calculate his profit. Answer _____	Profit = $425 - $295 = **$130**	
12.	 What is the TOTAL length of the two pieces of rods shown? Answer _____	Total length = $5\frac{1}{2} + 6\frac{2}{5}$ = 11 $\frac{5 + 4}{10}$ = **$11\frac{9}{10}$**	
13.	 Write the time shown in the clock above in digital notation. Answer _____	**2:40**	
14.	Calculate the AREA of a square of side 14cm. Answer _____	Area of square = S x S = 14 x 14 = **196cm^2**	

15.	The perimeter of an equilateral triangle is 84cm. What is the length of ONE side of the triangle? Answer _____ cm	Perimeter of Triangle= 84cm Side = 84 ÷ 3 **= 28cm**	
16.	Complete the net of the cone. 		
17.	 How many lines of symmetry are there in the shape shown above? Answer _____	**1 line of symmetry**	
18.	 Write the name of the solid shown above. Answer _____	**CYLINDER**	

19.	The bar graph below shows the height of ochro plants.  **Height of plants in cm** How many plants are taller than 37cm? Answer _____	15 + 5 = **21**	
20.	The pictograph shows the favourite sports played by children in a class. **Sport** / **No. of Children** **Football** ☺☺☺☺☺☺☺ **Cricket** ☺☺☺☺☺ **Volleyball** ☺☺☺☺ If there are 32 children in this class, what number does each ☺ represent? Answer _____	16 ☺ = 32 1 = ☺ 32 ÷ 16 ☺ = **2 children**	

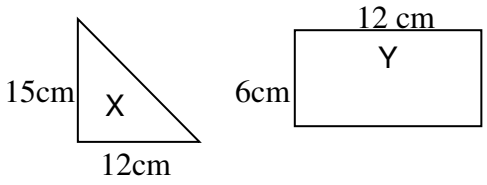
SECTION 2

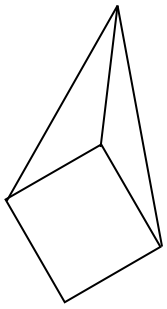
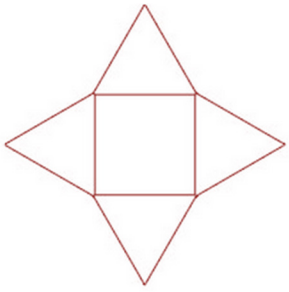
Each question is worth either 2 or 3 marks. Answer ALL questions. Show ALL working in the Working Column.

No.	Items	Working Column	Mark
21.	Subtract 4632 from 6975 Answer _____ (2)	**2343**	
22.	If $\frac{2}{3}$ of Marlon's money is \$60.00, calculate the total amount of money Marlon has. Answer _____ (2)	$\frac{2}{3}$ = \$60 $1 = \frac{60}{1} \times \frac{3}{2}$ **= \$ 90**	
23.	Multiply $4\frac{1}{2}$ by $3\frac{1}{3}$ Answer _____ (2)	$4\frac{1}{2} \times 3\frac{1}{3}$ $= \frac{9}{2} \times \frac{10}{3}$ **=15**	
24.	For every 5 adults present at a family treat, there were 12 children. If there were 30 adults present, how many children were there? Answer _____ (2)	5 adults = 12 children 1 adult = $\frac{12}{5}$ 30 adults = $\frac{12}{5} \times \frac{30}{1}$ **= 72 children**	
25.	$\frac{5}{8}$ m of cloth is used to make a vest. How many metres of cloth are needed to make 12 similar vests? Answer _____ (2)	1 vest = $\frac{5}{8}$ 12 vests = $\frac{5}{8} \times \frac{12}{1}$ **= 7.5 m**	

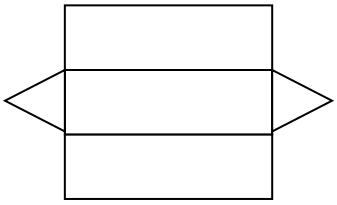
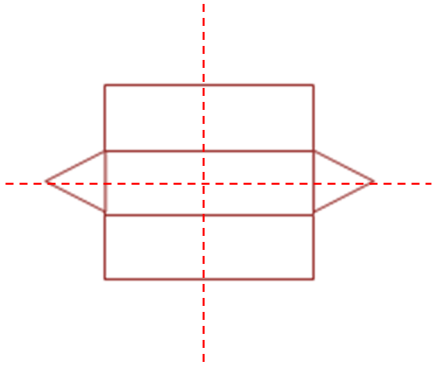
26.	From a piece of cloth 12m long, Sally used 4.5m to make a dress, 2.8m to make a skirt and the rest to make a suit. Calculate how much cloth she used to make a suit. Answer _____ (3)	Suit = 12 – (4.5 + 2.8) = 12 – 7.3 = **4.7m**	
27.	65% of a class was present on Friday. If there were 7 children absent, how many children were there in the class altogether? Answer _____ (3)	Present = 65% Absent = 35% Absent = $\frac{35}{100}$ or $\frac{7}{20}$ $\frac{7}{20}$ = 7 1 = $\frac{7}{1}$ x $\frac{20}{7}$ = **20 students**	
28.	A survey showed that in a group of 25 people, 8 people liked red, 12 liked green and the rest liked blue. What percent of the people liked blue? Answer _____ (2)	Blue = 25 – (8 + 12) = 25 – 20 = 5 Percent liked blue = $\frac{5}{25}$ x $\frac{100}{1}$ = **20%**	

29.	The opposite faces of a die are painted in green, white and black. When thrown, points are awarded as follows: COLOURS | POINTS Green | 5 White | 10 Black | 15 Tom made three throws and got white twice and black once. How many points did he score? Answer _____ (1) Jerry scored 70 points. Complete the table below to show how many times Jerry threw the colour WHITE. COLOURS | NO. OF THROWS Green | 1 White | Black | 3 (2)	Tom = (2 x 10) + (1 x 15) = 20 + 15 = **35 points** COLOURS | NO. OF THROWS Green | 1 White | Black | 3 Jerry = 70 1 green = 1 x 5 = 5 3 black = 3 x 15 = 45 White Points = 70 – (5 + 45) = 70 – 50 = 20 White Throws = 20 ÷ 10 **= 2 throws**	
30.	Larry earns $120.00 per day. He spends $\frac{1}{4}$ of his money on lunch. (a) How much does his lunch cost? Answer _____ (1) (b) Calculate how much change Larry remains with after buying lunch.	(a) Lunch $= \frac{1}{4} \times \frac{120}{1}$ = **$ 30** (b) Change = $ 120 - $30 = **$90**	

	Answer _____ (2)		
31.	Below are diagrams of triangle X and rectangle Y.  Which figure has the GREATER area? Answer _____ (3)	Area of triangle = $\frac{B \times H}{2}$ $= \frac{15 \times 12}{2}$ $= 90cm^2$ Area of rect. = L x W = 12 x 6 $= 72cm^2$ **∴ Figure X has the greater area**	
32.	A father is three times as heavy as his son. If together they weigh 96kg, how heavy is the father? Answer _____ (2)	Son = X Father = 3X Father and Son = 4X 4X = 96kg X = 96 ÷ 4 = 24 Father = 24 x 3 = **72kg**	
33.	A bus arrived in Arima at 8:07a.m. It took 15 minutes for the passengers to get on and 48 minutes to get to Sangre Grande. (a) At what time did the bus get to Sangre Grande? Answer _____ (2) (b) If the bus returned to Arima at 10:55a.m, how long did the bus	(a) Time taken = 8:07 + (15 + 48) = 8:07 + 1:03 = **9:10 am** (b) Return = 10:55 9:10 = **1hr 45 minutes**	

	take to return? Answer _____ (1)		
34.	Calculate the AMOUNT to be repaid on a loan of $5000.00 for 5 years at $12\frac{1}{2}\%$ per annum. Answer $_____ (3)	S.I = $\frac{P \times R \times T}{100}$ = $\frac{5000 \times 5 \times 25}{100 \times 2}$ = $3125 Amount = $5000 + $3125 = **$ 8125**	
35.	CHARLIE'S CHAIR RENTAL Plastic Chairs – $2.00 per chair Chrome Chairs - $3.00 per chair A school rented 150 plastic chairs and 25 chrome chairs for graduation. Calculate how much money the school would have to pay for the rental of ALL the chairs. Answer _____ (3)	Total = (150 x 2) + (25 x 3) = $300 + $75 = **$375**	
36.	Draw the net of the solid shown. 		

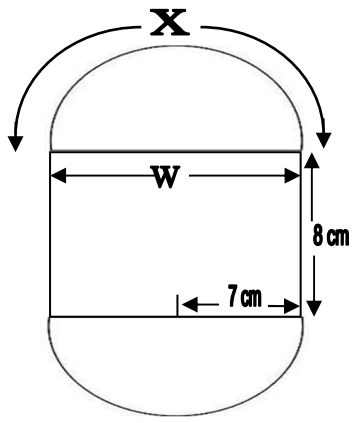
	(2)		
37.	**MANGOES** **4 FOR $10.00** (a) How much would mother pay for 1 DOZEN mangoes? Answer _____ (1) (b) How many mangoes can mother buy with $45.00? Answer _____ (2)	(a) 4 mangoes = $10 1 mango = $\frac{10}{4}$ 12 mangoes = $\frac{10}{4}$ x $\frac{12}{1}$ = **$30** (b) $10 = 4 mangoes $5 = 2 mangoes $40 = 4 x 4 = 16 mangoes $45 = 16 + 2 = **18 mangoes**	
38.	Paul is making tickets for a fundraiser using bristol board. The size of each ticket is 20cm by 15cm. How many tickets can Paul get from a larger sheet of Bristol board of length 2m and width 1.5m? Answer _____ (3)	Bristol Board = 2m x 1.5m = 200cm x 150cm Tickets = 20cm x 15cm No. of tickets = $\frac{200 \times 150}{20 \times 15}$ = **100cm**	

39.	Draw in the line(s) of symmetry on the net of the figure shown below.  (2)		
40.	The incomplete tally chart shows the favourite toys of Standard One pupils. **TOYS** / **TALLY** / **FREQUENCY** Transformers / 𝍸 𝍸 ||| / Lego Blocks / Play Doh / 𝍸 𝍸 𝍸 ||| / 19 If there are 40 pupils in Standard One complete the tally and frequency chart above. Answer _____ (2)	**TOYS** / **TALLY** / **FREQUENCY** Transformers / 𝍸 𝍸 ||| / Lego Blocks / 𝍸 ||| / 8 Play Doh / 𝍸 𝍸 𝍸 ||| / 19	

SECTION 3

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

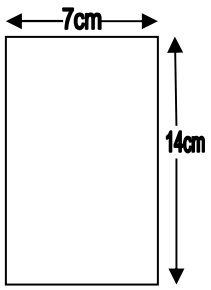
41.	In a school-show for 65 students, $\frac{4}{5}$ of the students attended. (a) How many students attended the show? Answer:_____(2) (b) How many students did not attend the show? Answer:_____(1) (c) If there were 4 teachers who attended the show, calculate the fraction of the viewing population that was made up of teachers. Answer:_____(2)	(a) Attended = $\frac{4}{5}$ x $\frac{65}{1}$ **= 52 students** (b) Did not attend = 65 – 52 **= 13 students** (c) $\frac{4}{56} = \frac{1}{14}$	
42.	There are 240 guavas in a box. Jack got $\frac{3}{10}$ of the guavas, Jill got $\frac{1}{4}$ and Sam took the rest. (a) How many more guavas Jack received than Jill? Answer: _____(2) (b) Calculate the number of guavas Sam got. Answer:_____(2) (c) Sam sold 40 of his guavas. How many guavas does Sam now have? Answer: _____(1)	(a) Jill = $\frac{1}{4}$ x $\frac{240}{1}$ = 60 guavas Jack = $\frac{3}{10}$ x $\frac{240}{1}$ = 72 guavas Difference = 72 – 60 **= 12 guavas** (b) Sam = 240 – (60 + 72) = 240 – 132 **= 108 guavas** (c) Sam = 108 – 40 **= 68 guavas**	

43.	Two semi-circles and a rectangle are joined together as shown.  Use the information from the diagram to calculate the following: (a) the value of **w.** Answer:_____(1) (b) the length of the curved part labeled **X.** Answer:_____(2) (c) the perimeter of the shape. Answer:_____(2)	(a) W = 7 x 2 = **14cm** (b) Circumference = D x π $= \frac{14}{1} \times \frac{22}{7}$ = 44cm X = 44 ÷ 2 X = **22cm** (c) Perimeter of shape = 44 + 8 + 8 = **60cm**	

44.	A DVD club charges an overdue fee of $2 per night per movie. Ryan paid overdue fees of $32 for returning 4 DVD movies late. (a) How many nights were the movies late? Answer:_____(3) (b) How many movies Ryan rented if he paid $30 in overdue fees for 3 nights? Answer:_____(2)	(a) 4 DVD's = $32 1 DVD = $32 ÷ 4 = $8 $2 = 1 night overdue $8 = 1 x 4 = **4 nights overdue** (b) 1 night = $2 3 nights = $2 x 3 = $6 $6 = 1 movie overdue $30 = **5 movies overdue**	

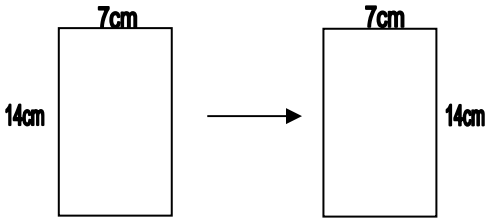
45.

(a) Calculate the perimeter of the rectangle shown.



Answer:_____(1)

(b) This rectangle is moved to join another similar rectangle (along their lengths).



Name the combined shape formed.

Answer:_____(2)

(c) Calculate the perimeter of the combined shape.

Answer:_____(2)

(d) How many lines of symmetry are there in the combined shape?

Answer:_____(1)

(a) Perimeter = 2L + 2W
= (2x14) + (2x7)
= 28 + 14
= **42cm**

(b) **Square**

(c) Perimeter of square = S x 4
= 14 x 4
= **56cm**

(d) **4 lines of symmetry**

46. The pictograph below shows the population of four schools.

POPULATION OF FOUR SCHOOLS	
School **A**	☺ ☺ ☺
School **B**	☺ ☺ ☺ ☺ ☺
School **C**	☺ ☺
School **D**	☺ ☺ ☺

☺ = 50 pupils.

(a) What is the population of school **C**?

Answer:_____(1)

(b) How many more pupils attended school **B** than school **A**?

Answer:_____(1)

(c) What is the total population of the four schools?

Answer:_____(1)

(d) What fraction of all the pupils attend school **A**?

Answer:_____(2)

(a) 2 x ☺ = 2 x 50
= 100 pupils

(b) 2 x ☺ = 2 x 50
= 100 pupils more

(c) Total Population
= 13 x ☺
=650 pupils

(d) $\frac{150}{650} = \frac{\mathbf{3}}{\mathbf{13}}$

END OF TEST 18