Mo	aths - Sample Test		Secondary Entrance
1)	Calculate the area of the shape. Choose your answer from the following 5 options: A. 20 cm <sup>2</sup> B. 17 cm <sup>2</sup> C. 18 cm <sup>2</sup> D. 16 cm <sup>2</sup> E. 15 cm <sup>2</sup> Answer:	5cm 3cm	Marks 2cm 1cm 1cm 1cm 1cm
2)	Solve the following problem involving navigation. Choose your answer from the 5 options given: Sidhika is programming her lawnmower with a simple algorithm that will allow it to avoid the trees in the back yard. The algorithm only allows the directions FORWARD, TURN RIGHT 90°, and TURN LEFT 90° to be programmed in. What instructions will take it from the point on the map marked S and facing east to the point marked F, without hitting any trees? A. RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 2, RIGHT 90°, FORWARD 1, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 2, RIGHT 90°, FORWARD 1, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, E. LEFT 90°, FORWARD 3, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 1, Answer:	한·한·한·한·한·한·한·한·한·	F 梵 梵
3)	Solve the following problem using the pictogram. Choose your answer from the 5 option The pictogram shows the number of different colours of lipstick that were sold this week How many pink lipsticks were sold this week? A. 3 B. 4 C. 15 D. 17 E. 20 Answer: Solve the following problem involving division. Choose your answer from the 5 options of Work out the question to the right: A. 35 B. 37 C. 39 D. 41 F. 43	s given: 5 c. Less the Red 1 Black Pink 1 Clear 1 given: 1	an 5
Mat	Answer:	© Copyright - Secondary Entra	<b>?</b>
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Mo	aths - So	imple T	est				Secondary Entrance
5)	Solve the following p Choose your answer How has shape X bee A. Rotated 90 degre B. Rotated 90 degre C. Reflected and rot D. Reflected and rot E. Reflected and rot	problem involving from the 5 option en transformed? ees clockwise ees counter-clock tated 45 degrees tated 90 degrees tated 45 degrees	transformations. ns given:	× G	<b>_</b>	Answer:	Marks
6)	Solve the following v Choose your answer Erik uses 2cm <sup>3</sup> blocks A. 9 cm <sup>3</sup> B. 24 cm <sup>3</sup> C. 12cm <sup>3</sup> D. 48 cm <sup>3</sup> E. 36 cm <sup>3</sup> Answer:	rolume and capa from the 5 option s to make a box. Y	city problem. ns given: What is the volume	of his box?			
7)	Solve the following p Choose your answer The pie chart shows school. How many tr A. 18 B. 15 C. 10 D. 20 E. 22 Answer:	problem involving from the 5 option how a class of 30 ravel by bus?	pie charts. hs given: ) children travel to		Walk	br D <sub>216°</sub> Bus	
8)	Find the option that         5, 10, 15,?         A. 20       B	best completes tl . 25	ne sequence. Fill in C. 30	the missing D. 21	blank by selecting or E. 22	ne of the following 5 optio Answer:	ns.
9)	Inside the brackets the The function to the the solution of the the solution of the the solution of the soluti	nere is a number wo outside numb )5 . 7	that has been form ers stays the same C. 9	ed through of for the ques	a function to the two tion. What is the mis E. 1	o numbers outside the brac ssing number? Answer:	kets.
10)	The first number has number to become the Choose your answer $2 \rightarrow 6$ A. × 2 + 2	been manipulate he second numbe from the 5 option B. × 3 + 2	ed in some way to g r? NB: some option: ns given: C. + 5	get to the ne s take the fir D. + 6	xt number. What is t st number as y. E. +6 - 4	he function that leads the Answer:	first
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Mo	aths - S	ample	Test			Se	condary trance						
11)	The set of number	rs below are all re hat would best fi	elated in some way t into the rules of t	<i>).</i> he set from the 5	options:	A	Marks						
	1, 27, 8, 64, 125 A. 216	B. 315	C. 144	D. 169	E. 555	Answer:							
12)	In a block of flats there are 1266 rooms. In 212 rooms there are single beds, in 611 rooms												
	there are double	beds. How many i	rooms have neither	single nor doub	le beds?	Answer:							
	A. 467	<b>B.</b> 537	C. 474	D. 443	E. 523								
13)	Solve the following	ng problem below	involving moneta	r <mark>y change</mark> . Choos	e your answer from the 5	options given:							
	Sean and Ravi go They then split a They ask to leave	to a café and get slice of cake that a tip of 10%, and	a coffee that was is £1.20 in total. I pay with a £10 no	£2.30 each. ote. How much cl	nange do they get?	Answer:							
	A. £6.38	B. £3.62	C. £3.38	D. £3.48	E. £1.38								
14)	Find the missing I The Library has 6 many green fictio	number in the tab 45 books. The tab n books are there	le. Choose your an le shows the numb ?	swer from the 5 o	options given: non-fiction books with di	ifferent colour covers. How							
		Fiction boo	ks Non-fict books	ion									
	Black Blue	46	43 53										
	Red Grey	26 64	43 25										
	Green Purple	?	46										
	Pink	B. 34	C. 26	D. 24	E. 44	Answer:							
15)	Solve the followi	a problem involvi	ing fractions (hoo		rom the Elections given:								
13)	The teacher mark What fraction of	the questions were	a spelling test. 16 e right?	questions are wr	ong.	Answer:							
	<b>A.</b> <sup>1</sup> / <sub>2</sub>	<b>B.</b> <sup>2</sup> / <sub>3</sub>	<b>C.</b> <sup>1</sup> / <sub>4</sub>	D. 1/3	E. <sup>2</sup> / <sub>4</sub>								
16)	Solve the following	ng algebraic probl	em. Choose your o	nswer from the S	options given:								
	Given the followi 12b + 6 × 7 = y	ng equation, if b =	8, what is y?			Answer:							
	A. 138	<b>B.</b> 135	C. 128	D. 62	E. 182								
17)	Solve the following	ng multiplication r	oroblem. Choose ye	our answer from	the 5 options given:								
	This year, my age is a multiple of 5. Next year it will be a multiple of 6.												
	I am older than 1	.0 but younger the	an 60. How old am	l?	E 40	Answer:							
		<b>U</b> . LJ	J. 4L	J. JJ	L. 40								
18)	Solve the following	ng rounding proble	em. Choose your a	nswer from the 5	options given:	A							
	What is 1/4 of 37	rounded to the ne	arest whole numb	er?	EOF	Answer:							
	n. 3.2	0. 9.3	C. 10	U. 9	с. ў.Э								
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19)	.9) Solve the following problem involving averages. Choose your answer from the 5 options given:       Mark         A class of 10 students take a maths test. Here are their scores out of 20.       16, 11, 15, 17, 11, 20, 14, 11, 15, 18											
	Whi A.	ich of the fo Mode: 15; Range: 9	ollowing <b>B.</b>	g options sho Mode: 15; Range 7	ws the c C. N F	orrect mo Aode: 11; Range: 9	ode and D.	range of the Mode: 11; Range: 10	e scores E.	S? Mode: 9 Range: 1	Answer: 11	
20)	Solv Solv A.	ve the follo ve: 15² ÷ 3 5	wing pro	oblem involv 25	ing num C. 1	ber facto .22	rs. Choo D.	se your ansv 24	wer fro E.	m the 5 o 15	options given: Answer:	
21)	Solv Will Hov	ve the follc bert buys 9 w much mo	owing pro pens co ney doe	oblem involv osting £1.20 s Wilbert sav	ing perc each. He ve from t	entages. 9 gets a 4 1he purch	Choose y 0% disco ase?	your answer ount on his p	from t	he 5 optio	ons given: Answer:	
22)	A. Solv Two	£6.48 ve the follo	B. owing protection	£0.48 obability pro d together an	C. £ blem. Cl nd their	2.70 noose you points are	D. 11 answe e added	£0.27 er from the 5 to give a to	E. 5 optior tal.	£4.32 ns given:		
	Wh	at is the pr	obability 1 2	y of scoring 7 2 3	? The pi	robability 3 4 5	table ho	as been prov	vided to	6 7	u.	
		2 3 4 5	5 4 5 6 7	4 5 6 7 8		5 6 7 8 9	7 7 8 9	8 9 10		8 9 10 11 12		
	A.	<sup>1</sup> / <sub>9</sub>	В.	1/3	<b>C.</b> <sup>1</sup>	/6	D.	1/5	E.	1/2		
23)	Solv Beld Ger Slov Ron Finl Rus Ireld	ve the follo ow is a reco cherlands 2 many 0°C vakia -2°C nania -3°C Land -6°C csia -12°C and 3°C	wing proof of te	oblem involv	ing nega	ative num	ibers. Ch es arour	oose your a	nswer f	from the so	5 options given: ame day and time.	
	A.	at is the dif 9°C	B.	0°C	C. 1	atures in .°C	Romania D.	a and Irelan 6°C	d? E.	3°C	Answer:	
24)	Solv Kris A ju If Kr	ve the follc stopher and umper costs ristopher b	owing pro l his frie s 220 Yu uys one	oblem involv nds are on h an and a sco jumper and	ing exch oliday in urf costs two scar	ange rate China. Tl 132 Yuar ves, wha	es. Choo: he excho n. t is the t	se your answ inge rate is s otal cost in	wer fron £1 = 8.8 pounds	m the 5 o 80 Yuan. s?	options given: Answer:	
	A.	£49	В.	£52	C. £	56	D.	£55	E.	£50		
Mat	hs							4			© Copyright - Secondary Entrance. All Rights Reserv	red.

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25)	Solve the followin	ng nun ers bel	nber puzzle. Cl low and select	hoo t th	se your answer e correct answe	froi er in	m the 5 option figures.	s giv	en:	Mark
	<ul> <li>Twelve million</li> <li>Thirty thousand</li> <li>One thousand</li> <li>Forty-nine</li> </ul>	d								Answer:
	A. 12031049	<b>B.</b> 1	12030149	C.	12003149	D.	12301049	E.	12003149	
26)	Solve the followin	ng time ows tin	e problem. Cho nes for a bus f	oos Fron	e your answer f n Rodney Green	rom to \	the 5 options Wood Green.	give	n:	
	Rodney Gree	n	06:50		07:23 07:	56	08:29			
	Sidney Stree	t	07:03		07:36 08:	09	08:42			
	Queens Roa	d	07:11		07:44 08:	17	?			
	College Roa	d	07:19		07:52 08:	25	08:58			
	Wood Greer	ו	07:31		08:04 08:	37	09:10			
	Ella and Betty are Wood Green. If be	e two s oth th	sisters living a eir schools sta	t Ro Irt c	odney Green. Ell at 7:50 am. who	.a's it is	school is on Qu the time differ	ueen rence	s Road and Betty's on in minutes in the	
	times they get the	eir bus	es?		,					Answer:
	A. 13	<b>B.</b> 3	33	C.	21	D.	27	E.	19	
27)				cl.						
21)	Solve the followin	ig ada	intion problem.	. Ch	oose your answ	/er i	rom the 5 opti	ons	given:	
	Shelley buys two her supermarket.	gift se How r	ts costing £31 nuch is that in	ea tot	ch, a perfume f tal?	or £	27 and other g	groce	eries for £23 from	Answer:
	A. £112	В. <u>f</u>	131	c.	£92	D.	£111	E.	£103	
28)	Solve the followin	ng prol	blem involving	ı de	cimals. Choose	you	ır answer from	the	5 options given:	
	Solve: 27.86 + 4.2	29								Answer:
	A. 70.76	B. 3	31.25	C.	31.115	D.	31.35	E.	32.15	
29)	Solve the followin	na prol	blem involving	ı dis	stance and time	Ch		wor	from the 5 options give	en.
23)	A flight travels at		stant speed of	F 71	0 miles per be	ur fo	r thirtoon hour	vvcr	nom the 5 options give	
	Another flight tra What is the differe	vels a ence ir	t a constant speed of t the distance	bee trav	d of 840 miles p velled by the tw	oer l vo fl	hour for elever ights?	n hou	ırs.	Answer:
	A. 130 miles	B. 1	10 miles	C.	100 miles	D.	50 miles	E.	30 miles	
30)	Solve the followin	ng prol	blem <mark>involvin</mark> g	l sp	eed. Choose you	ur a	nswer from the	e 5 o	ptions given:	
	Kuran's car travel	led 21	.0 miles in the	las	t 210 minutes.	Who	at was the spe	ed of	f the car during the jou	urney?
	A. 10 miles per hour	B. 1 ł	l mile per nour	c.	40 miles per hour	D.	60 miles per hour	E.	100 miles per hour	Answer:
31)	The following pro	blem i	involves BODM	IAS	. Choose your a	nsw	ver from the fol	llowi	ng 5 options given:	
	Solve:									
	9 + 8 ÷ 4 = 44 ÷ ?									Answer:
	A. 4	B. 5	5	C.	6	D.	7	E.	8	
Mat	hs						5		© Copyright -	Secondary Entrance. All Rights Reserved.

Mo	aths - So	ample 1	lest					Secondary
32)	Solve the following Calculate the differe 46%, <sup>21</sup> / <sub>25</sub> , 0.50, 55 A. 0.51	number line prob ence between the %, <sup>6</sup> / <sub>25</sub> , 0.81 <b>3. 0.53</b>	lem. Choose your smallest and the C. 0.34	answer fr largest of D. 0.60	om the 5 optic the following D E.	ons given: numbers. 0.63	Answer:	Marks
33)	Solve the following If A = 15, B = 40, C = D ÷ C × E = × E A. A	verbal reasoning = 4, D = 60, E = 10 3. B	problem. Choose ), which of the let C. C	your answ ters comp D. D	ver from the 5 letes the series E.	options given: s? E	Answer:	
34)	Solve the following Choose your answer The grid shows the e tent is at the coordi A. Hasan B. Ursula C. Gizela D. Sergei E. Fatima Answer:	problem involving r from the 5 option coordinates of pla nates (4,6). Who i	g the grid and its ns given: ayers in a paintbal s closest to the co	coordinate Il fight. Th Imouflage	e camouflage • tent?	10 9 8 7 6 5 4 3 7 6 6 6 7 6 7 6 7 6 7 7 6 7 7 7 6 7	AN URSULA X 4 5 6 7 8	SERGEI × 9 10
35)	Solve the following Choose your answer Triangle PQR sits in: QR of the triangle for Given the angles be a = 15° b = 35° A. 75° B. 55° C. 165° D. 50° E. 145° Answer:	angle problem. r from the 5 option side the rectangle orms the line QR o low, what is the s	ns given: QRST such that c of the rectangle. ize of angle c?	a side		c P		s T
36)	Solve the following problem. Choose yo the 5 options given: Which of the 5 oper represents the box? A. A B. B C. C D. D E. E Answer:	folding net our answer from n net options	₽€	A ★ ₩ ♥	B ♥₩ ₩ ₩ ₩			E
Mat	hs				6	© Copyright	- Secondary Entrance	e. All Rights Reserved.

