The Halifax Grammar Schools Admissions Test (Practice): Mathematics

Read the following carefully.

- 1 The Mathematics Test consists of 40 questions. The time allowed for this test is 30 minutes.
- 2 This is a multiple-choice test, in which you have to mark your answers to each question on the answer sheet.
- Each of the questions in the test is followed by a choice of four possible answers: A B C
 D. Only **one** answer is right; the others are wrong.
- 4 For each question, choose the correct answer and make a clear pencil line in the box next to that answer on the answer sheet. An example of this is shown on the answer sheet.
- 5 If you wish to change an answer, be sure to rub out the mark completely before making another mark.
- 6 Be sure to keep your place on the answer sheet. Mark your answers in the column that has the same number as the test question.
- 7 You may not be able to finish all the questions, but try to do as many as you can. If you cannot do a question, do not waste time on it but go on to the next. If you are not sure of an answer, choose the one you think is best.
- 8 You will not be allowed to use a calculator, but you will need to use rough paper for working out your answers.
- 9 Please do not put any unnecessary marks on the answer sheet. You may write on the Question Booklet.
- 10 Complete the test using an HB pencil, a ruler and a rubber.
- 11 Remember you will have 30 minutes to do the test.

If you are unsure about how to mark your answers, say so now.

Entrance Test Example Questions

	14562	2 – 1251 =						
	A.	15813	В.	13311	C.	13113	D.	12131
2	591 +	- 372 + 85 =						
	A.	1046	В.	948	C.	1048	D.	848
3	Conv	ert $\frac{3}{20}$ into a perce	entage	9				
	A.	3%	В.	23%	C.	15%	D.	30%
4	Servi timeta	ce 521 is a bus f able	rom H	alifax to Illingwor	th and	l back to Halifa	ax. Here	is part of its
	Halif Cous Illing Over Halif	ax King Edward St sin Lane (Club Lane gworth Tewit Lane Iden Way Top ax King Edward St	reet e) Top reet	521 521 521 1615 1623 1631 1626 1634 1642 1641 1649 1657 1648 1656 1704 1700 1708 1716	521 1639 1650 1705 1712 1724	521 521 52 1647 1656 17 1658 1707 17 1713 1722 17 1720 1729 17 1732 1741 17	21 521 05 1713 16 1724 31 1738 38 1745 50 1756	5215211721172917321740174617541753180118041812
	John	lives near Tewit	lana	Top. He wants to	ho in	Lalifay by 170		
	What A.	time should he o	B.	the bus from Tew 1713	vit Land C.	e Top? 1729	D.	1705
	What A.	time should he o	B.	the bus from Tew 1713	rit Land C.	e Top? 1729	D.	1705
5	What A. The n What	time should he of 1639 nean of four num is the fourth num	B. B. B.	1713 s 6. Three of the	rit Land C.	1729 bers are 4, 5 a	D. nd 8.	1705
5	What A. The n What A.	time should he of 1639 nean of four num is the fourth nun 11	B. B. bers inber? B.	1713 s 6. Three of the	C.	1729 0 Ders are 4, 5 a	D. nd 8. D.	1705 5 ¾
5	What A. The n What A. Whicl	time should he of 1639 nean of four num is the fourth num 11	B. B. bers inber? B.	1713 s 6. Three of the 7	C.	1729 1729 Ders are 4, 5 a 24	D. nd 8. D.	1705 5 ¾
5	What A. The n What A. Whicl	time should he of 1639 nean of four num is the fourth num 11 h decimal number 35.29	B. B. B. B. B.	1713 s 6. Three of the 7 earest to 35.3? 35.4	C.	1729 1729 Ders are 4, 5 a 24 35.303	D. nd 8. D.	1705 5 ¾ 35.298
5 6 7	What A. The n What A. Whick A.	time should he of 1639 nean of four num is the fourth num 11 h decimal numbe 35.29 down the first pr	B. B. B. B. B. B. B.	1713 s 6. Three of the 7 earest to 35.3? 35.4 umber that come	C.	1729 1729 Ders are 4, 5 a 24 35.303	D. nd 8. D.	1705 5 ¾ 35.298

8	Whi for t	ch of the lines sh his shape?	iown a	are lines of reflec	tion sy	mmetry		
	Α.	l, m and o	B.	l and n	C.	l, m, n and o	D.	m and o
9	A nur	mber pattern has	s first t	erm 7 and goes	up in 5	s like this:		
				7, 12, 17	7, 22,			
	What	t will be the last c	digit of	the 100 th term?				
	Α.	0	В.	7	C.	2	D.	5
10	Marg she h How	ery goes into a s nas exactly one c much did the per	shop a of eacl ncil co	nd buys a pencil h British coin with ost?	. She p n a valu	bays with a £1 c ue less than £1.	oin. In	her change
	A.	88p	В.	32p	C.	12p	D.	17p
11	Two	Roman children	were	working out the d	ifferen	ce in their ages	. They	wrote down
	this s	sum.		XIV –	- IX =			
	What	answer did they	get?					
	Α.	III	В.	V	C.	IV	D.	VI
12	What	number is the a	rrow p	pointing to on this	scale	?		
		0	2.	5 5		7.5		T
	A.	5.3	B.	6.2	C.	6.5	D.	5.6
13	Work	t out $\frac{3}{7}$ of £84						
	A.	£12	B.	£196	C.	£8.40	D.	£36





What extra percentage of land does Jane give to carrots than Helen

A. 25% B. 10% C. 65% D. 90%



24	The diameter of a 5p coin is 18mm What is the most number of coins that will fit into a 300mm ruler (between 0 and 300 only).							
	The diagram is not drawn to scale.							
	A.	16	В.	20	C.	17	D.	90
25	Find	the area of the	shade	ed part		7 cm	15 cm	
	A.	165 cm ²	В.	109 cm ²	C.	137 cm ²	D.	28 cm ²
26	Jamie He sp 10% 25% 15% How	e received £24 p pent it as follows on sweets, on magazines on games much did Jamie	oocket :: have	money last we	ek.			
	A.	£12.00	B.	£2.40	C.	£15.00	D.	£6.60
27	The toget	bells at Kings Sc outes. At Princes her at 8.30am. M her?	hool r ss Scł When	ing every 6 mir hool the bells ri is the next time	nutes. At ng every e the bell	Queens Scho 9 minutes. All s of the three s	ol the b three t schools	ells ring every bells ring will ring
	A.	1.00pm	В.	9.15am	C.	10.00am	D.	11.00am
28	Using	y = 5 and y = 2	, work	cout 3	5x - 2y			
	A.	4	B.	11	C.	18	D.	9

29	Arya is putting packs of fruit juice into a large box. The box will hold 5 packs along its length, 5 packs along it's width and 5 layers as shown. How many boxes of fruit juice will fit in the box altogether?							
	A.	125	В.	15	C.	13	D.	100
30	Graham has daughters Emma and Rachel. Emma is 3 years older than Rachel. Graham is 57. This is 12 years older than his daughters' joint ages. How old is Rachel?					Rachel.		
	Α.	39	В.	21	C.	24	D.	42
31	lf you	I double a numbe	er and	add 1, is the an	swer:			
	A.	Prime	В.	Always even	C.	Always odd	D.	Even or odd
32	In a s Zaq b How	shop Jo buys 3 lo buys 3 lollipops a much does 1 che	ollipop Ind 5 d ew cos	s and 2 chews a chews costing 85 st?	nd pay ip.	s 70p.		
	A.	14p	В.	17p	C.	35p	D.	5р
33	In Fra In the An ap A car	ance speeds are United Kingdon proximate convertist travelling at 4	meas n spee ersion 8km/h	sured in kilometre eds are measure is 5mph = 8km/l n, calculate the sp	es per h d in mil n peed ir	nour (km/h). les per hour (m n mph.	ph).	
	A.	30mph	В.	6mph	C.	9.6mph	D.	240mph
34	The length of a rectangle is twice its width. If the width is 7cm, what is the perimeter of the rectangle?						e perimeter of	
	A.	56 cm	В.	28 cm	C.	98 cm	D.	42 cm
35	Work	out the missing	term	of this number p	attern			
				2, 2, 3, 4, 6,	_, 14, 1	22,		
	Α.	8	В.	13	C.	9	D.	10

Find	$\frac{3}{4}$ O	$f \frac{1}{2} o$	f 80
	4	2	

A. 60 B. 30	C. 50	D. 40
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Answers

Question	Letter	Answer	
1	B	13311	
2	C C	1048	
2	0 C	15%	
3	<u>ר</u>	1705	
5	B	7	
5		7 25 209	
7		67	
0	B	07	
0			
9		<u> </u>	
10		12p	
11	В	V	
12		0.5	
13	D	£36	
14	В	6	
15	C	£8	
16	C	15m ² and 16m	
17	D	12 and 33	
18	В	See diagram on question	
19	C	154 cm ²	
20	В	19	
21	В	£1.96	
22	Α	25%	
23	С	30°	
24	Α	16	
25	С	137 cm ²	
26	Α	£12.00	
27	С	10.00am	
28	В	11	
29	Α	125	
30	В	21	
31	С	Always odd	
32	D	5p	
33	Α	30mph	
34	D	42 cm	
35	С	9	
36	В	30	
37	В	8	
38	С	25%	
39	Α	£8	
40	D	110	