Examination Report

Part 2 Fellowship of the Royal College of Ophthalmologists (FRCOphth) Oral Examination

Singapore – January 2024

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Contents

1   Summary

The part 2 Fellowship of the Royal College of Ophthalmologists (FRCOphth) oral examination has two elements. The Objective Structured Clinical Examination (OSCE) consists of six stations worth a total of 198 marks, whilst the Structured Viva consists of five stations worth a total of 120 marks. One of the OSCE stations is conducted with the Vivas.

A total of 14 candidates sat the examination.

The pass mark for the Structured Viva was 80, and the pass mark for the OSCE was 129.

The reliability values (alpha) of the oral examination were 0.794 (Viva) and 0.476 (OSCE).

The pass rates for the Viva and the OSCE were 12/14 (85.7%) and 10/14 (71.4%) respectively. The final overall exam pass rate was 10/14 (71.4%).

2   Standard Setting

The pass marks for each section of the exam are identified using the Hofstee method:

2.1   Hofstee method

After the examination, examiners were asked to review the parameters for the standard setting based upon their judgment of the difficulty of the stations. The following values were used to set the pass mark:

- The maximum credible pass mark for the examination = 65%
- The minimum credible pass mark for the examination = 55%
- The maximum credible pass rate for the examination = 100%
- The minimum credible pass rate for the examination = 45% (OSCE), 55% (VIVA)

The cumulative fail rate as a function of the pass mark and the co-ordinates derived from the four values above were plotted on a graph. The point where a line joining the two coordinates intersects the cumulative function curve is used to identify the pass mark. Plots for each of the exam elements (Viva; OSCE) can be found under the relevant sections in the report.

One standard error of measurement (+1SEm) is added to each element's raw Hofstee pass mark, in order to generate the final pass mark for that section.

3 The Structured Vivas

There were five Structured Viva stations, which were held in January 2024. The communication skills OSCE station was conducted as one of the viva stations, making six stations in all that ran on the day. The OSCE communication station is not included in the analysis of the viva; it is merely administered at the same time). Each viva lasted 10 minutes. The viva stations were:

Station 1:   Patient investigations and data interpretation

Station 2:   Patient management 1

Station 3:   Patient management 2

Station 4:   Attitudes, ethics, and responsibilities.

Station 5   Audit, research and EBM and Health promotion and disease prevention

3.1 Results

Maximum mark (five stations, 10 examiners (2 per station), 24 marks per station): 120

Table 1: Marks for the Viva

Statistic	Value	Percentage
Raw Pass mark (using Hofstee method)	75.1/120	62.6%
Mean score	92.1/120	76.7%
Median score	97.0/120	80.8%
Range	71 - 103	59.2% - 85.8%
Reliability (Cronbach's alpha)	0.794	
SEM (rounded)	4.54 (5)	3.8% (4.2%)
Final adjusted, rounded pass mark (+1 SEM)	80/120	66.7%
Pass rate	12 out of 14	85.7%

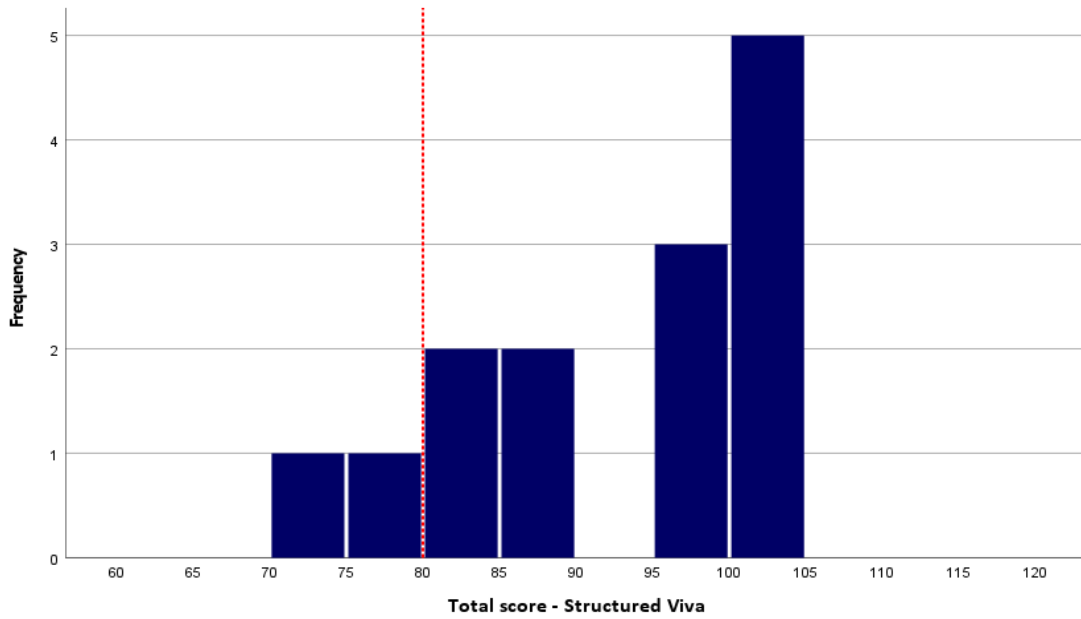*Figure 1: Viva scores (red line denotes pass mark)*

Table 2: Station Summary — viva

Station	Category	Maximum possible	Mean	Median	Min	Max
1	PI	24	16.3	16.5	10	22
2	PM1	24	20.0	21.0	14	24
3	PM2	24	19.1	20.0	11	24
4	AER	24	20.5	22.0	16	24
5	HPDP/EBM	24	16.1	15.5	13	22

Table 3: Correlation between examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5
Category	PI	PM1	PM2	AER	HPDP/EBM
Correlation	0.86	0.88	0.80	0.71	0.64

Table 4: Mean absolute difference in examiners' marks at each station

| Station	Station 1	Station 2	Station 3	Station 4	Station 5
Category	PI	PM1	PM2	AER	HPDP/EBM
Mean absolute difference*	0.86	0.57	0.86	0.50	1.0

The 'mean absolute difference' is the average difference between Examiner A and Examiner B scores for each station

Table 5: Correlation between viva stations

	Station 1	Station 2	Station 3	Station 4	Station 5
Station 1					
Station 2	0.50				
Station 3	-0.11	0.36			
Station 4	0.23	0.77	0.36		
Station 5	0.28	0.32	-0.02	0.16	

3.2 Standard setting for the Structured Vivas – Plot

Figure 2: Hofstee plot– SV
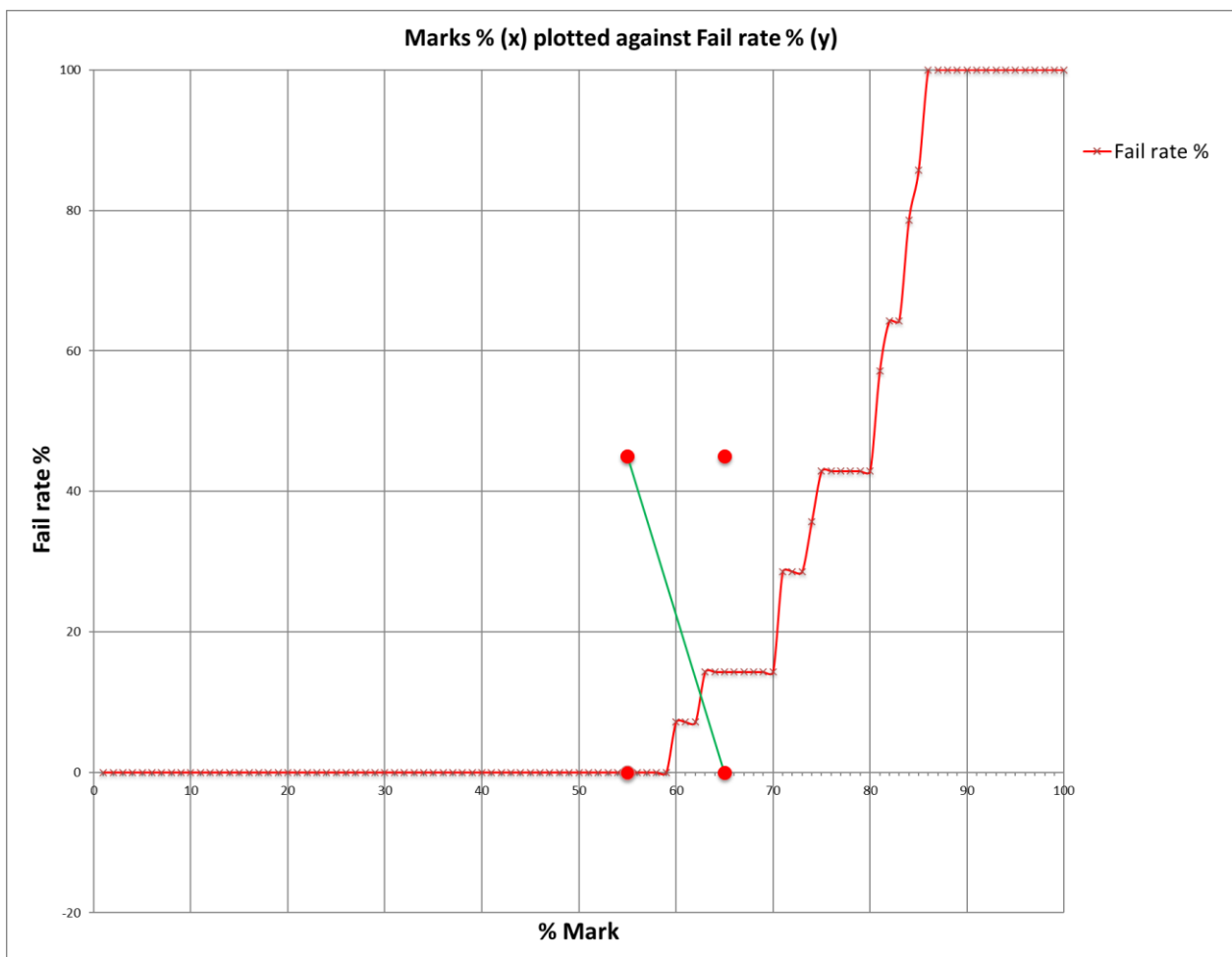
4 The objective structured clinical examination (OSCE)

There were six OSCE stations in all. The five Clinical stations were held on different days to the Vivas (OSCE Station 6 was held with the Vivas). All were held in January 2024. The OSCE stations were:

Station 1: Anterior Segment

Station 2: Glaucoma and Lid

Station 3: Posterior Segment

Station 4: Strabismus and Orbit

Station 5: Neuro-ophthalmology

Station 6: Communication Skills (takes place logistically with viva aspect of the exam)

4.1 Results

Maximum mark (six stations, 12 examiners (2 per station), 36 marks per station (comms station 18 marks per station)): 198

Table 6: Marks for the OSCE

Statistic	Value	Percentage
Pass mark (using Hofstee method)	120.9/198	61.1%
Mean score	*132.0/198*	*66.7%*
Median score	*133.5/198*	*67.4%*
Range	*114 − 153*	*57.6% - 77.3%*
Reliability (Cronbach's alpha)	*0.476*	
SEM (rounded)	*8.35 (8)*	*4.22% (4.04%)*
Final adjusted rounded pass mark (+1 SEM)	129/198	65.2%
Final Pass rate	10 out of 14	71.4%

*Please note that the <u>Final</u> pass rate is presented, that includes any adjustments. All other analysis is based on original, unadjusted data.

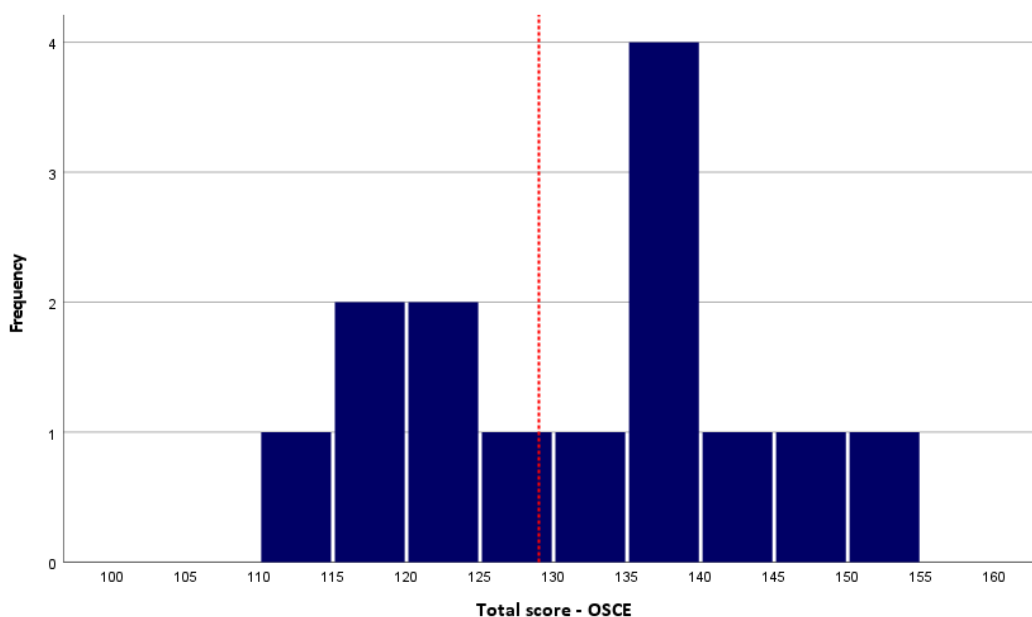*Figure 3:   Distribution of OSCE scores (red line denotes pass mark)*

Table 7:   Station Summary — OSCE

Station	Category	Maximum Possible	Mean	Median	Min	Max
1	Anterior segment	36	25.4	25.5	17	33
2	Glaucoma and lid	36	24.9	25.0	16	32
3	Posterior segment	36	26.2	28.5	8	33
4	Strabismus and orbit	36	21.4	22.0	13	28
5	Neuro-ophthalmology	36	20.4	21.0	9	29
6	Communication skills	18	13.8	15.0	9	17

Table 8:   Correlation between examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Category	Anterior segment	Glaucoma and lid	Posterior segment	Strabismus and orbit	Neuro-ophthalmology	Communication skills
Correlation	0.92	0.93	0.90	0.82	0.87	0.33

Table 9:   Mean absolute difference in examiners' marks at each station

| Station	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Category	Anterior segment	Glaucoma and lid	Posterior segment	Strabismus and orbit	Neuro-ophthalmology	Communication skills
Mean absolute difference*	0.64	0.79	1.21	1.36	1.79	1.79

*The 'mean absolute difference' is the average difference between Examiner A and Examiner B scores for each station

Table 10: Correlation between OSCE stations

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Station 1						
Station 2	0.38					
Station 3	-0.50	0.03				
Station 4	-0.18	-0.05	-0.04			
Station 5	-0.29	0.27	0.26	0.16		
Station 6	-0.10	-0.02	-0.17	0.03	-0.31	

4.2   Standard setting for the OSCE - Plot

Figure 4:   Hofstee plot – OSCE
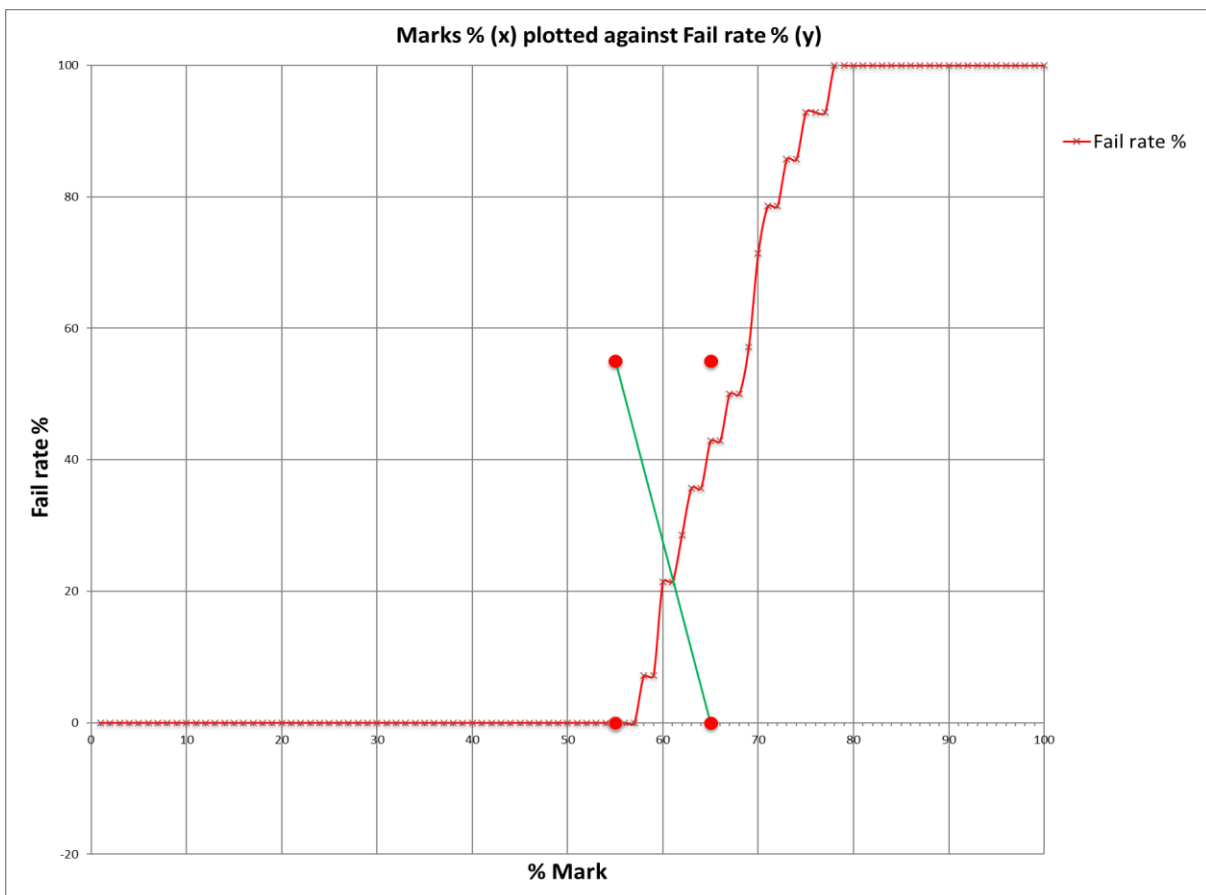
5 Overall results for the oral examination

5.1 Results

Table 11: Overall results summary

Statistics	Value	Percentage
Pass Mark	209/318	65.7%
Mean	224.1/318	70.5%
Median	227/318	71.4%
Range	188 - 255	59.1% - 80.2%

To pass the oral examination candidates had to either:

i) Pass both the Viva (by scoring ≥80/120) and OSCE (by scoring ≥ 129/198) *or*

ii) Pass the OSCE, achieve at least 75/120 (62.5%) in the Viva, and achieve ≥209/318 (65.7%) overall.

Overall, ten out of fourteen candidates passed the Part 2 Oral examination this diet.

Table 12: Pass rates

Statistics	Value	Percentage
Overall pass rate for the oral examination	10/14	71.4%

Figure 5: Distribution of total scores (red line denotes overall pass mark)
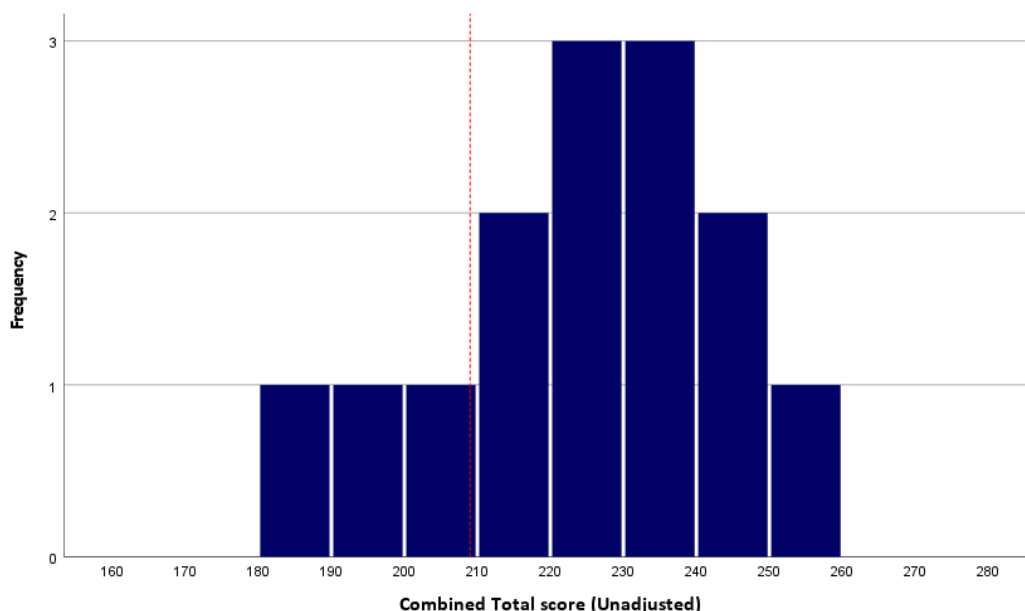
5.2 Comparison to previous examinations

Table 13: Comparison to previous examinations

Date	Candidates	Viva pass mark	Viva reliability	OSCE pass mark	OSCE reliability	Oral pass rate	Oral pass rate in OST
Jan-24 Singapore	14	67%	0.8	65%	0.5	71%	n/a
Nov-23 Cairo	16	63%	0.9	66%	0.7	75%	n/a
Nov-23 Dundee	99	62%	0.8	59%	0.8	71%	n/a
Oct-23 New Delhi	8	59%	0.9	60%	0.8	50%	n/a
Oct-23 Athens	11	62%	0.9	64%	0.7	46%	n/a
Jul -23	20	64%	0.8	65%	0.9	65%	n/a
Apr-23	158	65%	0.7	63%	0.8	61%	86%
Nov-22	120	64%	0.8	60%	0.8	62%	n/a
Apr-22	114	62%	0.7	63%	0.8	68%	91%
Nov-21	119	60%	0.6	61%	0.8	73%	85%
Apr-21	74	62%	0.7	64%	0.8	77%	84%
Mar-21	46	58%	0.8	60%	0.8	70%	94%
Nov-20	86	62%	0.4	64%	0.8	74%	85%
Nov-19	85	67%	0.7	60%	0.8	71%	80%
Apr-19	84	63%	0.6	64%	0.9	64%	79%
Nov-18	106	58%	0.8	64%	0.8	58%	74%
Apr-18	74	62%	0.8	60%	0.8	70%	80%
Apr-17	105	61%	0.8	63%	0.8	66%	82%
Nov-16	107	60%	0.8	63%	0.8	71%	84%
Apr-16	61	63%	0.8	63%	0.9	56%	69%
Nov-15	72	61%	0.8	62%	0.8	69%	86%
Apr-15	77	60%	0.9	60%	0.9	62%	80%
Nov-14	79	63%	0.8	62%	0.7	63%	70%
Apr-14	104	57%	0.8	61%	0.8	58%	65%
Apr-13	109	60%	0.8	63%	0.8	57%	56%
Nov-12	103	58%	0.9	61%	0.8	58%	64%
The MCQ examination has been de-coupled from the oral examination since April 2014							

Table 14: Cumulative results by deanery (September 2010 to date; not including Nov 22 data)

Country	Deanery	Number of passes	Number of candidates	Pass rate (%)
UK	East Midlands	61	84	*72.6*
	East of England	77	127	*60.6*
	East of Scotland	14	15	*93.3*
	London and KSS (Kent, Surrey and Sussex)	335	437	*76.7*
	Mersey	68	93	*73.1*
	North of Scotland	12	20	*60.0*
	Northwestern	79	125	*63.2*
	Northern	67	85	*78.8*
	Northern Ireland	18	24	*75.0*
	Oxford	53	63	*84.1*
	Peninsula (Southwest)	28	48	*58.3*
	Severn	48	63	*76.2*
	Southeast of Scotland	28	34	*82.4*
	Wales	51	81	*63.0*
	Wessex	43	71	*60.6*
	West Midlands	94	149	*63.1*
	West of Scotland	44	65	*67.7*
	Yorkshire	94	145	*64.8*
OS	Eire	2	3	*66.7*
	Europe and Overseas	51	96	*53.1*
		1267	*1828*	*69.3*