GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

ADDITIONAL RESPONSES

PREPARATORY EXAMINATION 2020 / *VOORBEREIDENDE EKSAMEN 2020*

SUBJECT / *VAK*	:	**MATHEMATICS / *WISKUNDE***
		MEMORANDUM
SUBJECT CODE / *VAKKODE*	:	**10601**
PAPER / *VRAESTEL*	:	**1**
DATE OF EXAMINATION / *DATUM VAN EKSAMEN*	:	**25 SEPTEMBER 2020**
SESSION / *SESSIE*	:	**1**

ATTENTION / *AANDAG*:CHIEF INVIGILATOR / *HOOFTOESIGHOUER*

Please bring the following additional responses to the MEMORANDUM to the attention of all relevant candidates.

1.1.4	$x - 3x^{\frac{1}{2}} = 4$ $x - 3x^{\frac{1}{2}} - 4 = 0$ $\left(x^{\frac{1}{2}} - 4\right)\left(x^{\frac{1}{2}} + 1\right) = 0$ $x^{\frac{1}{2}} = 4 \text{ or } x^{\frac{1}{2}} \neq -1$ $x = 16$	✓ standard form/ *standard vorm* ✓ factors/ *faktore* ✓ critical values/ *kritieke waardes* ✓ rejection/ *verwerping* ✓ squaring/ *kwadreer* ✓ answer/ *antwoord*	(6)

P.T.O.

11.1	$0,2 = (x + 0,2) \times (0,2 + 0,3)$ $0,2 = (0,2 + x) \times 0,5$ $0,2 = 0,1 + 0,5x$ $0,1 = 0,5x$ $x = 0,2$ $\therefore \ x + y + 0,2 + 0,3 = 1$ $0,2 + y + 0,5 = 1$ $0,7 + y = 1$ $y = 0,3$	✓ P(A) x P(B) = P(A and/ *en* B) ✓ *x*- value/ *x-waarde* ✓ sum of probabilities = 1 *som van waarskynlikheid = 1* ✓ *y*-value/ *y-waarde*	(4)
11.2	n(S) = 6! = 720 n(X and Y together) = 2! × 5! = 240 n (X and Y not together) = 720 – 240 = 480 P(X and Y not together) = $\frac{480}{720} = \frac{2}{3}$ = 0,67	✓ 6! = 720 ✓ 2! × 5! = 240 ✓ answer/ *antwoord*	(3)
11.3.3	4 digit numbers (with repetition and last digit = 0) 10 x 10 x 10 x 1 = 1 000 **OR/ *OF*** 9 x 10 x 10 x 1 = 900	✓ product/ *produk* ✓ answer/ *antwoord* **OR/ *OF*** ✓ product/ *produk* ✓ answer/ *antwoord*	(2)

Mr. Jonathan Williams

DIRECTOR: EXAMINATIONS MANAGEMENT
29/09/2020