GRADE 11	TERM 3	PROBABILITY – PORTFOLIO ASSIGNMENT MEMORANDUM	

Marks: 45

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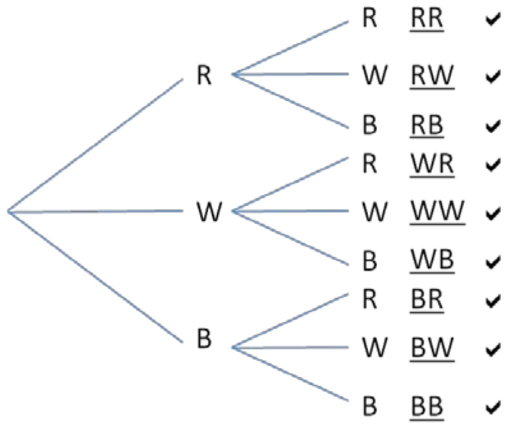
1. $\frac{8}{24}$ ✓ $= \frac{1}{3}$ ✓ (2)
2. Yes ✓ as the first token is replaced, keeping the total number of tokens and the number of red tokens the same. ✓ ✓ (3)
3. 

(9)
4. $\frac{1}{9}$ ✓ ✓ (2)
5. $\frac{1}{9}$ x 100 ✓ = 11% ✓ (2)
6. 100 – 11 ✓ = 89% ✓ (2)
7. No ✓ as the chances of winning are so much lower than winning. ✓ ✓ (3)
8. 400 x 5 ✓ = R2 000 ✓ (2)
9. 0,11 ✓ x 400 ✓ = 44 people ✓ (3)
10. 44 x 10 ✓ = R440 ✓ (2)
11.
    a. $\frac{2}{9}$ ✓ ✓ (✓ denominator and ✓ numerator) (2)
    b. $\frac{3}{9} = \frac{1}{3}$ ✓ ✓ (2)
    c. $\frac{4}{9}$ ✓ ✓ (2)
    d. $\frac{3}{9} = \frac{1}{3}$ ✓ ✓ (2)
    e. 0 ✓ ✓ (2)
12. The game can be adjusted by making it an equal chance of winning and losing ✓ so you could have only 2 colours ✓ and have an option of winning with either two of the same and one specific colour first ✓ or you can have more colours but have a scenario with a 50% (or close to 50%) chance of winning. ✓ (*any answer that shows understanding of fair game play with an example*) (5)