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| [Image result for quiz](https://www.google.com.au/imgres?imgurl=http://churchfieldsjunior.com/wp-content/uploads/2016/04/73621.jpg&imgrefurl=http://churchfieldsjunior.com/quiz-night/&docid=0TWZ1XmaB2M3GM&tbnid=Yd7kvqdc7hzNIM:&vet=10ahUKEwjgsue_q7jZAhWLurwKHdAtAhkQMwi6AigkMCQ..i&w=700&h=700&bih=963&biw=1920&q=quiz&ved=0ahUKEwjgsue_q7jZAhWLurwKHdAtAhkQMwi6AigkMCQ&iact=mrc&uact=8) | **Year 11 Methods**  **Term 2 Week 4 Quiz** |  |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. | Shade the region of the Venn Diagram indicated by the following sets.    (A B)’ C | **4** |
| 2. | What is the part of a Venn Diagram where two circles overlap is called and what is the symbol?  A  B  C | **2** |
| 3. | Find if n(A) = 10, n(B) = 8, = 4 | **2** |
| 4. | Let set *A* be defined as *A* = { *x* : *x* is a positive integer less than 10 } .   1. State *n*( *A*) 2. Explain whether the statement 0 ∈ *A* is true or false. | **2** |
| 5. | Find the exact value of:  (a)  (b) (c) | **3** |
| 6. | Let set *B* ={ 1, 2, 3, 4 }. An integer is formed by choosing two digits, at random and without repetition, from *B* .   1. Illustrate this in a tree diagram 2. Determine the probability that the integer formed is a prime number. 3. Determine the probability that the integer formed is even, given that it is a multiple of three. | **5** |
| 7. | The universal set is the set of integers from 1 to 20, A is the set of numbers divisible by 3, B is the set of square numbers and C is the set of prime numbers.   1. Describe the set A ∩B∩C        1. Determine A∪ B        1. Determine n(A∪B∪C)’      1. A number is selected at random from the universal set, determine P(A|B) | **4** |