**Maths Assessment**

**Term One, 2016**

**Stage 5**

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

You have 1 hour to complete all sections of the assessment.

1. **Subtract the following**

1. **Multiply the following**
2. **Complete the fraction line**
3. **A boat is bought for $30 000 and depreciates at 7% pa reducing balance depreciate. How much is the boat worth after:**
4. 6 years
5. 11 years
6. **A coin is tossed once**
7. What is the sample space?
8. Is this a random event?
9. **A single die is rolled ten times and these are the numbers it shows: 4, 5, 1, 4, 2, 6, 1, 3, 4, 1**
10. What is the sample space of rolling a die and is rolling a die a random event? Why?
11. In this experiment, what is the relevant frequency of a 2 being rolled?
12. In this experiment what is the relevant frequency of a 4 being rolled?
13. **A standard deck of cards (with no jokers) is shuffled and placed face down and spread out.**
14. If a card is drawn at random, what is the size of the sample space?
15. If a card is drawn at random, what is the probability it is an ace?
16. If a card is drawn at random, what is the probability it is the ace of spades?
17. If a card is drawn at random, what is the probability it is NOT a diamond?
18. If a card is drawn at random, what is the probability it is red?
19. **A library has books about sport, food and history only.**
20. The probability of selecting a single history book is 2/9. How many history books would you expect to be in a group of 36 randomly selected books?
21. The probability of selecting a single book about food is 4/9. What is the probability of selecting a single book about sport?
22. If 54 books are selected at random, how many of each type of book could be expected to be selected?

**END OF ASSESSMENT**