

Master Maths 7 Worksheet 72

Probability 2

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Name: _____

1. Rate the probability, as a *decimal*, of the following events occurring.

- (a) The temperature will be above 30° in Darwin tomorrow.
- (b) Christmas will be in December this year.
- (c) If you threw a dart at a dart board you scored a 'bulls-eye'.
- (d) If you threw a dart at a dart board you hit the board.
- (e) You wake up before 6 o'clock tomorrow morning.
- (f) In a class of 20 students at least one student wears spectacles.

2. A letter is chosen at random from the word **STATISTICS**.

Give the following probabilities as a fraction, in its simplest form, decimal and percentage.

(a) Find the probability the letter is **A**.

<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
<i>fraction</i>	<i>decimal</i>	<i>percentage</i>

(b) Find the probability the letter is **I**.

<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
<i>fraction</i>	<i>decimal</i>	<i>percentage</i>

(c) Find the probability the letter is **S** or **T**.

<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
<i>fraction</i>	<i>decimal</i>	<i>percentage</i>

3. A night of the week is randomly chosen for a meeting. Give the following probability as a fraction.

What is the probability the night is on the weekend?

4. Stan wanted to find out how long it would take him to ride his bicycle to school. He recorded the times, to the nearest minute, for twenty trips to school. These are shown below.

27 22 18 16 20 23 22 19 28 20
28 24 19 23 25 18 21 25 18 22

Give the following probabilities as *decimals*. Based on these figures:

- (a) what is the probability it takes Stan less than 20 minutes to ride to school?
- (b) what is the probability it takes Stan more than 20 minutes to ride to school?

5. Samantha is a tennis player and in one match she had 60 serves of which 15 were aces.

(a) Based on these figures, what is the probability Samantha will serve an ace? Give answer as a *percentage*.

Anna also plays tennis. While practising with a friend she had 20 serves and hit eight aces.

(b) Based on these figures, what is the probability Anna will serve an ace? Give answer as a *percentage*.

(c) For which player is the probability more accurate and why?
