

Quiz 2

Deadline	Wednesday, 25 September 2019 at 4:00PM
Latest Submission	Tuesday, 24 September 2019 at 7:14PM
Raw Mark	5.00/5.00 (100.00%)
Late Penalty	N/A
Final Mark	5.00/5.00 (100.00%)

Question 1 (1 mark)

Let $B = \{b, a, g, g, a, g, e\}$ and $C = \{c, a, b, b, a, g, e\}$

How many elements are there in $B \cap C$?

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✓ Your response was correct.

Mark: 1.00

Question 2 (1 mark)

Which of the the following sets have 6 elements? Select all that apply (intervals are over \mathbb{N})

(a) <input type="checkbox"/>	$[0,1] \times (1,6)$
(b) <input type="checkbox"/>	$(0,1) \times [1,6]$
(c) <input checked="" type="checkbox"/>	$(0,2] \times [1,4)$
(d) <input checked="" type="checkbox"/>	$[0,2] \times (1,4)$
(e) <input type="checkbox"/>	None of the others

✓ Your response was correct.

Mark: $\max(0.50 + 0.50, 0) = 1.00$

Question 3 (1 mark)

What is $|\{n : n \in \mathbb{N} \text{ and } n \mid 12\}|$?

(a) ☒

6

(b) <input type="radio"/>	7
(c) <input type="radio"/>	12
(d) <input type="radio"/>	13
(e) <input type="radio"/>	Infinite

✓ Your response was correct.

Mark: 1.00

Question 4 (1 mark)

Let $\Sigma = \{a,b,c,d,e,f,g\}$ and consider $w,v \in \Sigma^*$ given by $w = \text{cabbage}$, $v = \text{baggage}$

What is $\text{length}(wv)$?

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✓ Your response was correct.

Mark: 1.00

Question 5 (1 mark)

Let $\Sigma = \{c,u,p\}$ and $\Psi = \{m,o,p\}$

Which of the following words are in $\Sigma^* \setminus \Psi^*$? Select all that apply.

(a) <input type="checkbox"/>	λ
(b) <input checked="" type="checkbox"/>	cup
(c) <input type="checkbox"/>	mop
(d) <input checked="" type="checkbox"/>	ccc
(e) <input type="checkbox"/>	mmm

✓ Your response was correct.

Mark: $\max(0.50 + 0.50, 0) = 1.00$