SUBJECT: MATHS

Contents:

Unit 11. Graphs

Unit 12. Ratio and proportion

Unit 13. Probability

Instructions:

1) **Students MUST complete the study guide before revision classes.**
2) **Students are NOT ALLOWED to use calculators for problem-solving tasks.**

PART 1. MATHEMATICAL TERMS

NO.	TERMS	UNITS	DEFINITIONS	VIETNAMESE TRANSLATIONS
1	linear function	11		
2	coefficient	11		
3	equation of a line	11		
4	gradient	11		
5	-x intercept	11		
6	-y intercept	11		
7	ratio	12		
8	simplify	12		
9	common factor	12		
10	profit	12		
11	proportion	12		

12	shades	12		
13	comparison	12		
14	probability	13.1		
15	complementary event	13.1		

PART 2. EXERCISES

Question 1

The cost, $c, of hiring a taxi is $15 plus $2 per kilometre.

Enter numbers to complete the function for the cost of hiring a taxi for a distance of k kilometres.

c = [ ] k + [ ]

Question 2

Tanesha's pay for working *t* hours is calculated using this formula.

$P = 12.5t + 50

Calculate how much Tanesha will be paid if she works 15 hours.

P = $ [ ]

Question 3

The area of a park can be found using the function A = 5L +12
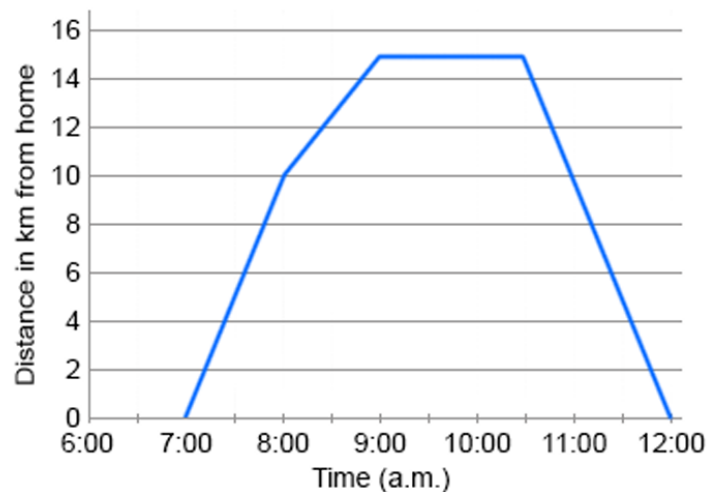
where L is the length of the park.

Hanane measures the length of the park to be 35 m.

Work out the area of the park.

[ ] m^2

Question 4

The travel graph shows Ambia's cycle ride from home.

For how long did she stop?
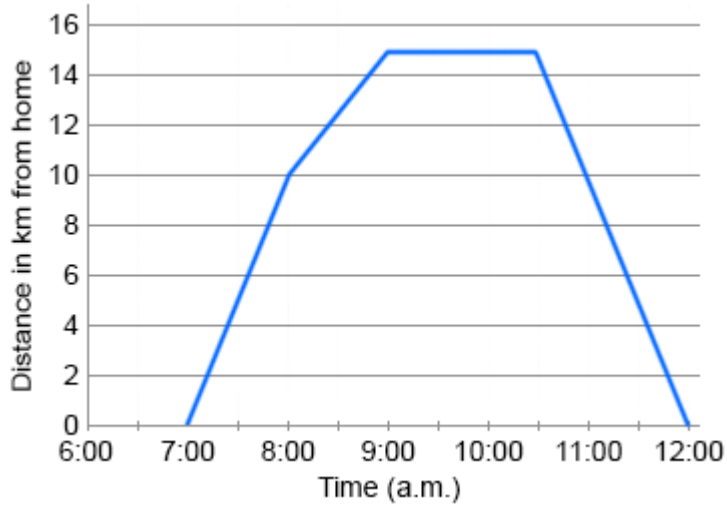
[ ] hours [ ] minutes

Question 5

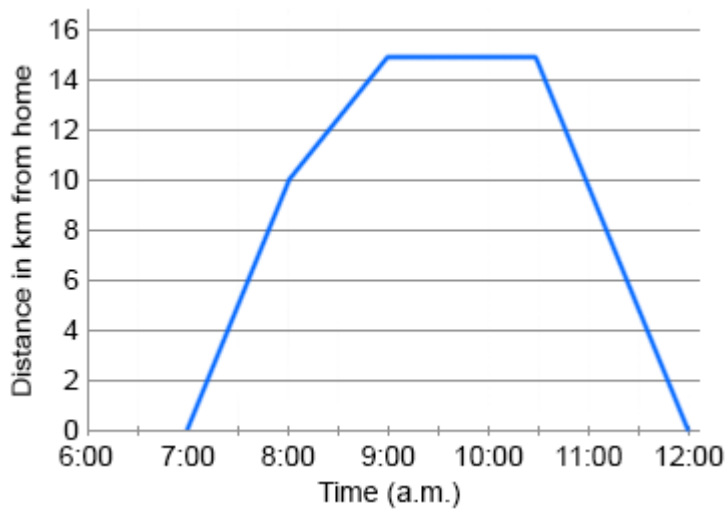The travel graph shows Ambia's cycle ride from home.

How far from home did she cycle?

[_____] km

Question 6

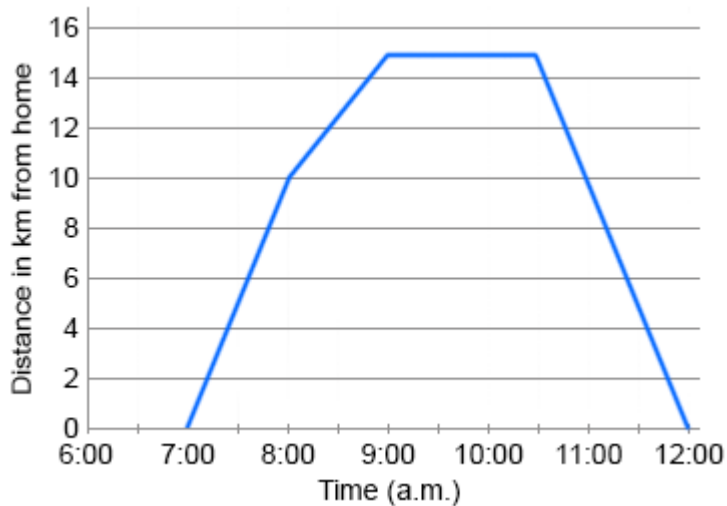The travel graph shows Ambia's cycle ride from home.

At what time did Ambia leave home?

[_____] : [_____]

Question 7

The travel graph shows Ambia's cycle ride from home.

Between which times was Ambia cycling fastest?

[   ] : [   ] and [   ] : [   ]

Question 8

The ratio 3 : 18 is the same as 1 : [   ]

Question 9

Simplify the ratio 0.75 : 1.5.

[   ] : [   ]

Question 10

An 84 cm rope is cut in the ratio 5 : 7.

How long is the shorter piece of rope?

Total = 12 parts

1 part = 84 cm ÷ 12

= 7 cm

Shorter piece = [   ] cm

Question 11

On a school trip the teacher to learner ratio is 1 : 15.

If 165 learners are going on the excursion, how many teachers are needed?

Number of teachers = [   ]

Question 12

Jai and Li inherited a sum of money in the ratio 3 : 2. Li received $800. How much was Jai's share?

$ [   ]

Question 13

If the probability of getting a six when I roll a fair six-sided dice is $\frac{1}{6}$, what is the probability that I don't get a six?

[   ]
[   ]

Question 14

The probability of the school football team losing their next match is 48%. What is the probability that they will not lose?

[   ] %

Question 15

A bag contains five red counters, three blue counters and one yellow counter. What is the probability that a randomly chosen counter from the bag will **not** be blue? Give your answer as a fraction in its simplest form.

[   ]
[   ]