



Maths-it Podcast F-10

Foundation GCSE Revision

Understanding Formulae

Topics

Use word formulae – Substitute into formulae – Derive formulae – Change the subject of a formula

Questions

1. Rob makes concrete posts. Here is a formula to work out how much he gets paid in a week.



$$\text{Wages} = \text{£}75 + \text{£}2 \text{ for each post made.}$$

Last week, Rob made 56 posts.

Work out how much Rob earned last week.

Wages = £.....
(Total 2 marks)

2. Here is a formula for calculating the cost to produce badges.

$$\text{Cost} = \text{machine set up cost} + \text{material cost} \times \text{number of badges}$$

Frances wants 5000 badges. Here are the costs for her badges,

Machine set up cost = £45 Material cost = £0.02

How much will it cost Frances for her badges?

Cost = £.....
(Total 3 marks)

3. Here is a formula, $t = 5r - s$.

Find t when $r = 4$ and $s = 3$



$t =$
(Total 2 marks)



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4. Fahad said, “when $x=2$, the value of $5x^2$ is 20.”

Malini said, “when $x=2$, the value of $5x^2$ is 100.”



(a) Who was right?

Explain your answer.

(2)

(b) Find the value of $5(x-1)^2$ when x is 5.

.....

(1)

(Total 3 marks)

5.

$$a = \frac{v-u}{5}$$

$v = 20, u = 5$

(a) Work out the value of a .

.....

(2)

$a = 2, v = 14$

(b) Work out the value of u .

.....

(2)

(c) Rearrange the formula to make v the subject.

.....

(2)

(Total 6 marks)