Lycée Des Arts
Hadat: Rue de Jamousee

Mark/ La note

Test in/ Examen de : .....

Time / La durée : .....

Name/Le nom : .....

Class/ La Classe: 1 S 2

Date / La date: .....

3rd-Exercise:

1a) $(\sqrt{2}+\sqrt{3})^2 = 5+2\sqrt{6}$.

b) $A_{EFGH} = 10+4\sqrt{6}\ cm^2$

Area of rect = length × width

length a is double width b (given)

so, $a = 2b$.

then $A = 2b \times b$.

$A = 2b^2$.

$2b^2 = 10+4\sqrt{6}$

$b^2 = \frac{2(5+2\sqrt{6})}{2}$

$b^2 = 5+2\sqrt{6}$.

so $b^2 = (\sqrt{2}+\sqrt{3})^2$ (proved).

thus, $\boxed{b = \sqrt{2}+\sqrt{3}\ cm}$ (comparing two +ve No, is the same as comparing their squares).

2) $P = 2(\text{length}+\text{width})$

$= 2(a+b)$

$= 2(2b+b)$

$= 2(3b)$

$P = 6b\ cm$

$P = 6(\sqrt{2}+\sqrt{3})\ cm$ $\boxed{\text{where } m = 6}$

P-5-7.