

LDDR - Niveau 2 TE 5: Ensembles - Calcul Algebrique

MATHS - Small test

22.09.2016

1MG01

Name _____

- 1) With $A = [-5; 9[$, $B =]3; \infty[$ and $C = [-4; 13]$, determine

$$B \cap C =$$

$$A \cup B \cup C =$$

$$\bar{A} =$$

- 2) Determine with the interval notation : $A = \{x \in \mathbb{R} \mid 4 \leq x^2 < 13 \}$

- 3) Complete the squares

$$x^2 + 6x + 11 =$$

$$x^2 - 4x - 9 =$$

- 4) Simplify as seen in the math class

$$\sqrt{27} =$$

$$\frac{2 + \sqrt{3}}{3 - \sqrt{3}} =$$

$$\sqrt{6 + \sqrt{11}} \cdot \sqrt{6 - \sqrt{11}} =$$

- 5) Give answers in the power form (a^n)

$$\sqrt{a} : \sqrt[5]{a} =$$

$$\frac{(a^4)^3}{a^{-2}} =$$

- 6) Solve the equations, without the second degree formula

$$2x^3 - 4x = 0$$

$$(x - 5)^2 - 2 = 7$$

- 7) Factorize (as much as you can)

$$81x^4 - 4$$

$$4x^2 - 20x + 25 =$$