



Test in/ Examen de :

Name/Le nom :

Class/ La Classe:

Time / La durée :

Date / La date:

$$2) z = \frac{22 \times (5+\sqrt{3})}{(5-\sqrt{3})(5+\sqrt{3})}$$

$$= \frac{22(5+\sqrt{3})}{5^2 - \sqrt{3}^2}$$

$$= \frac{22(5+\sqrt{3})}{22}$$

$$z = 5 + \sqrt{3}$$

$$3) (z-x)^2 = [(5+\sqrt{3}) - (5+4\sqrt{3})]^2$$

$$= [-3\sqrt{3}]^2$$

$$= 27$$

Thus, $(z-x)^2 = y$

$$\therefore y = 27$$

Part-C:

$$AB = \frac{3\sqrt{7} \times (4+\sqrt{7})}{(4-\sqrt{7})(4+\sqrt{7})} + \frac{2-4\sqrt{7}}{3}$$

$$= \frac{12\sqrt{7} + 3\sqrt{7}^2}{(4)^2 - (\sqrt{7})^2} + \frac{2-4\sqrt{7}}{3}$$

$$= \frac{12\sqrt{7} + 21}{16-7} + \frac{2-4\sqrt{7}}{3}$$

$$= \frac{8(4\sqrt{7}+7)}{9} + \frac{2-4\sqrt{7}}{3}$$

$$= \frac{4\sqrt{7}+7+2-4\sqrt{7}}{3}$$

$$AB = 3 \text{ cm}$$

$$NI = \sqrt{1.8 - 0.1 \times \left(\frac{4}{9}\right)} + 2$$

$$= \sqrt{\frac{1+8}{9} - \frac{1}{9} \times \frac{9}{4}} + 2$$

$$= \sqrt{\frac{9+7}{9}} \times \frac{2}{4} + 2$$

$$= \sqrt{\frac{16}{36}} \times \frac{2}{4} + 2$$

$$= \frac{4}{3} \times \frac{2}{4} + 2$$

$$= 3 + 2$$

$$NI = 5 \text{ cm}$$