



PING YI SECONDARY SCHOOL

Perseverance Yields Success

Name Huang Hsiang Yi

Class 302

Subject E-Math

No. 20

Date 12/1/2009

-Ex 2.4 <B.4.2>

1a) $x^2 - 12x + 36 = 0$

$a=1, b=-12, c=36$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$x = \frac{-(-12) \pm \sqrt{(-12)^2 - 4(1)(36)}}{2(1)}$

$x = \frac{12 \pm \sqrt{144 - 144}}{2}$

$x = \frac{12 \pm \sqrt{0}}{2}$

$x = \frac{12 \pm 0}{2}$

$x = \frac{12+0}{2}$ or $x = \frac{12-0}{2}$

$x = 6.000$ or $x = 6.000$

$$\begin{array}{r|l} x & 6 \\ \hline x & 6 \\ \hline x^2 & +36 +12x \end{array}$$

1c) $3x^2 - 2x - 5 = 0$

$a=3, b=-2, c=-5$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$x = \frac{-(-2) \pm \sqrt{(-2)^2 - 4(3)(-5)}}{2(3)}$

$x = \frac{2 \pm \sqrt{4+60}}{6}$

$x = \frac{2 \pm \sqrt{64}}{6}$

$x = \frac{2+8}{6}$

$x = \frac{2+8}{6}$ or $x = \frac{2-8}{6}$

$x = 1.667\#$ or $x = -1.000\#$

1e) $7x^2 + x - 2 = 0$

$a=7, b=1, c=-2$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$2a$

$x = \frac{-1 \pm \sqrt{1^2 - 4(7)(-2)}}{2(7)}$

$2(7)$

$x = \frac{-1 \pm \sqrt{1 + 56}}{14}$

14

$x = \frac{-1 \pm \sqrt{57}}{14}$

14

$x = \frac{-1 \pm 7.549834435}{14}$

14

$x = \frac{-1 + 7.549834435}{14}$

14

$x = 0.468\#$

or $x = \frac{-1 - 7.549834435}{14}$

14

$x = -0.611\#$

1f) $8x^2 + 9 = 0$

$a=8, b=0, c=9$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$2a$

$x = \frac{-0 \pm \sqrt{0^2 - 4(8)(9)}}{2(8)}$

$2(8)$

$x = \frac{-0 \pm \sqrt{0 - 288}}{16}$

16

$x = \frac{0 \pm \sqrt{-288}}{16}$

16

(Can not be solve)



PING YI SECONDARY SCHOOL
Perseverance Yields Success

Name Huang Hsiang Yi

Class 302

Subject E-Math

No. 20

Date 11/1/2009

2a) $2x(x-2) = x+3$

2c, d, 3c

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

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

$$2x^2 - 5x - 3 = 0$$

$$a=2, b=-5, c=-3$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2a

$$x = \frac{-(-5) \pm \sqrt{(-5)^2 - 4(2)(-3)}}{2(2)}$$

2(2)

$$x = \frac{5 \pm \sqrt{25 + 24}}{4}$$

4

$$x = \frac{5 \pm \sqrt{49}}{4}$$

4

$$x = \frac{5 \pm 7}{4}$$

4

$$x = \frac{5+7}{4}$$

4

or

$$x = \frac{5-7}{4}$$

4

$$x = 3.00\#$$

or

$$x = -0.500\#$$

Huang Hsiang Yi

Ex 2.4. <Pg 42>

12

Date: 12/1/2009

No.

2c) $(3x-2)^2 + 7 = 0$

$$(3x-2)(3x-2) + 7 = 0$$

$$9x^2 - 12x + 4 + 7 = 0$$

$$9x^2 - 12x + 11 = 0$$

$$a=9, b=-12, c=11$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-(-12) \pm \sqrt{(-12)^2 - 4(9)(11)}}{2(9)}$$

$$x = \frac{12 \pm \sqrt{144 - 396}}{18}$$

$$x = \frac{12 \pm \sqrt{-252}}{18} \quad (\text{Can not be solve})$$

d) $x(1-2x)+9=0$

$$x - 2x^2 + 9 = 0$$

$$-2x^2 + x + 9 = 0$$

$$a=-2, b=1, c=9$$

$$x = \frac{-(-1) \pm \sqrt{(-1)^2 - 4(-2)(9)}}{2(-2)}$$

$$x = \frac{-1 \pm \sqrt{1 + 72}}{-4}$$

$$x = \frac{-1 \pm \sqrt{73}}{-4}$$

$$x = \frac{-1 \pm 8.544}{-4}$$

$$x = \frac{-1 + 8.544}{-4} \quad \text{or} \quad x = \frac{-1 - 8.544}{-4}$$

$$x = -1.887 \quad \text{or} \quad x = 2.39 \#$$

3c) $(x-2)(x+2) = 4(x-2)$

$$x^2 - 4 = 4x - 8$$

$$x^2 - 4 - 4x + 8 = 0$$

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

$$a=1, b=-4, c=4$$

Date:

No.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-(-4) \pm \sqrt{(-4)^2 - 4(1)(4)}}{2(1)}$$

$$x = \frac{4 \pm \sqrt{16 - 16}}{2}$$

$$x = \frac{4 \pm \sqrt{0}}{2}$$

$$x = \frac{4}{2}$$

$$x = 2$$