/	解 説	中3　2次方程式 NO6	NAME	A	B	C
/	NO 5	完全平方で解く①				

Aコース

① $x^2+4x-5=0$

$x^2+4x = 5$

$x^2+4x+\left(\frac{4}{2}\right)^2 = +5+\left(\frac{4}{2}\right)^2$

$x^2+4x+4 = 5+4$

この式を目指していきます、次の式に行く!

$(x+2)^2 = 9$

$x+2 = \pm 3$

$x = +1, -5$

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④ $x^2-6x+4=0$

$x^2-6x = -4$

$x^2-6x+\left(\frac{6}{2}\right)^2 = -4+\left(\frac{6}{2}\right)^2$

$x^2-6x+9 = -4+9$

$(x-3)^2 = 5$

$x-3 = \pm\sqrt{5}$

$x = 3\pm\sqrt{5}$

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Bコース

② $x^2-10x+9=0$

$x^2-10x = -9.$

$x^2-10x+\left(\frac{10}{2}\right)^2 = -9+\left(\frac{10}{2}\right)^2$

$x^2-10x+25 = -9+25$

$(x-5)^2 = 16$

$x-5 = \pm 4$

$x = 9, +1.$

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⑤ $x^2-8x-11=0$

$x^2-8x = 11$

$x^2-8x+\left(\frac{8}{2}\right)^2 = 11+\left(\frac{8}{2}\right)^2$

$x^2-8x+4^2 = 11+4^2$

$x^2-8x+16 = 27$

$(x-4)^2 = 27$

$x-4 = \pm 3\sqrt{3}$

$x = +4\pm 3\sqrt{3}.$

Cコース

③ $x^2+2x-48=0$

$x^2+2x = 48$

$x^2+2x+\left(\frac{2}{2}\right)^2 = 48+\left(\frac{2}{2}\right)^2$

$x^2+2x+1 = 48+1$

$(x+1)^2 = 49$

$x+1 = \pm 7$

$x = 6, -8$

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⑥ $x^2+14x-31=0$

$x^2+14x = 31$

$x^2+14x+\left(\frac{14}{2}\right)^2 = 31+\left(\frac{14}{2}\right)^2$

$x^2+14x+49 = 80$

$(x+7)^2 = 80$

$x+7 = \pm 4\sqrt{5}$

$x = -7\pm 4\sqrt{5}$

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