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ACHA3000

1/11/21
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3. + x
i) $x^2 + 9x + 14 = 0$
 $(x+7)(x+2) = 0$
 $x+7=0$ $x+2=0$
 $\boxed{x=-7}$ $\boxed{x=-2}$

ii) $x^2 - 7x + 10 = 0$
 $(x-5)(x-2) = 0$
 $\boxed{x=5}$ $\boxed{x=2}$

iii) $x^2 + 8x - 20 = 0$
 $(x+10)(x-2) = 0$
 $\boxed{x=-10}$ $\boxed{x=2}$

iv) $x^2 - 49 = 0$
 $x^2 - 7^2 = 0$
 $\boxed{x=-7}$ $\boxed{x=7}$

v) $2x^2 - 3x - 20 = 0$

4. A B C
 $17x^2 = -5x + 14$
 $-5 \pm \frac{\sqrt{5^2 - 4 \times 17(-14)}}{2 \times 17}$

$-5 \pm \frac{\sqrt{25 - 4 \times 17(-14)}}{2 \times 17}$

$-5 \pm \frac{\sqrt{25 + 68(-14)}}{2 \times 17}$

$-5 \pm \frac{\sqrt{25 + 952}}{2 \times 17}$

$-5 \pm \frac{\sqrt{977}}{34}$

$x = \frac{977}{34}$ $x = -\frac{977}{34}$

$5.6x + 5y = 35$ ①

$7x - 4y = 31$ ②

$6x = 35 - 5y$

6.