

$-7x^2 + 14x + 21 = 0$   
 $A = -7 \quad B = 14 \quad C = 21$

$$X = \frac{-(-14) \pm \sqrt{(14)^2 - 4(-7)(21)}}{2(-7)}$$

$$X = \frac{-14 \pm \sqrt{196 - 4(-147)}}{-14}$$

$$X = \frac{-14 \pm \sqrt{706 + 588}}{-14} = \frac{-14 \pm \sqrt{1294}}{-14} = \frac{-14 \pm 38}{-14}$$

$\frac{-14 + 38}{-14} = 1 \pm -2 \quad 1 - (-2) = -1$   
 $\frac{-14 - 38}{-14} = 1 - (-2) = 3$

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$2x^2 - 14x + 24 = 0$   
 $A = 2 \quad B = -14 \quad C = 24$

$$X = \frac{-(-14) \pm \sqrt{(-14)^2 - 4(2)(24)}}{2(2)}$$

$$X = \frac{14 \pm \sqrt{196 - 192}}{4} = \frac{14 \pm \sqrt{4}}{4} = \frac{14 \pm 2}{4} = \frac{14}{4} \pm \frac{2}{4}$$

$3.5 \pm 0.5$   
 $3.5 + 0.5 = 4$   
 $3.5 - 0.5 = 3$

$-7x^2 + 63 = 0$   
 $A = -7 \quad B = 0 \quad C = 63$

$$X = \frac{-(-1) \pm \sqrt{(1)^2 - 4(-7)(63)}}{2(-7)}$$

$$X = \frac{-1 \pm \sqrt{1 + 1764}}{-14} = \frac{-1 \pm \sqrt{1765}}{-14} = \frac{1 \pm \sqrt{1765}}{14}$$

$\frac{1 + \sqrt{1765}}{14} = \frac{-602}{196} \cdot -3 = \frac{1}{-14} \cdot \frac{42}{-12} = \frac{574}{196} \cdot 3$

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$x^2 - 7x - 4 = 0$   
 $A = 1 \quad B = -7 \quad C = -4$

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

$$X = \frac{7 \pm \sqrt{49 + 16}}{2} = \frac{7 \pm \sqrt{65}}{2}$$

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$x^2 - 2x - 2 = 0 \quad / \quad A = 1 \quad B = -2 \quad C = -2$

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

$$X = \frac{2 \pm \sqrt{4 + 8}}{2} = \frac{2 \pm \sqrt{12}}{2} = \frac{2 \pm \sqrt{4 \cdot 3}}{2} = \frac{2 \pm 2\sqrt{3}}{2} = 1 \pm \sqrt{3}$$

$4x^2 - 24 = 0$   
 $A = 4 \quad B = 0 \quad C = -24$

$$X = \frac{-(-0) \pm \sqrt{(0)^2 - 4(4)(-24)}}{2(4)}$$

$$X = \frac{0 \pm \sqrt{0 + 384}}{8}$$

$$X = \frac{\pm \sqrt{384}}{8}$$

$$X = \frac{\pm \sqrt{384} \cdot 6}{64 \cdot 1}$$

$\pm \sqrt{6}$

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$2x^2 - 6x - 2 = 4 - 3 \quad / \quad 2x^2 - 6x - 4x - 2 + 3 = 0$   
 $2x^2 - 10x + 1 = 0 \quad A = 2 \quad B = -10 \quad C = 1$

$$X = \frac{-(-10) \pm \sqrt{(-10)^2 - 4(2)(1)}}{2(2)}$$

$$X = \frac{10 \pm \sqrt{100 - 8}}{4}$$

$\frac{10}{2} \pm \frac{\sqrt{92}}{4} = \frac{5}{2} \pm \frac{\sqrt{92}}{4}$

$\frac{5}{2} \pm \frac{\sqrt{23}}{4}$

$\frac{5}{2} \pm \frac{\sqrt{23}}{4}$

$\frac{5}{2} \pm \frac{\sqrt{23}}{2}$

$X = \frac{5}{2} \pm \frac{\sqrt{23}}{2}$

$-14x^2 + 4x + 14 = -6x^2 - 14x^2 + 6x^2 + 14x + 14 = 0$   
 $-8x^2 + 4x + 14 = 0 \quad A = -8 \quad B = 4 \quad C = 14$   

$$\frac{-(-4) \pm \sqrt{(-4)^2 - 4(-8)(14)}}{2(-8)} = \frac{4 \pm \sqrt{16 + 448}}{-16}$$

$$X = \frac{4}{-16} \pm \frac{\sqrt{464}}{-16} = \frac{29}{-16} \pm \frac{21.5}{-16}$$

$$X = \frac{1 \pm \sqrt{29}}{4}$$

$$\begin{array}{r} 29 \\ 16 \overline{) 296} \\ \underline{32} \\ 464 \\ \underline{464} \\ 0 \end{array}$$

