Questions

Solve the following equations:

linear:

1. $3x - 7 = 32$ x = 13
2. $(x + 2)/3 + (2x + 1)/5 = 6$ x = 7
3. $2/x = 2 + 5/2x$ x = -1/4

factorisation:

4. $8x^2 - x = 0$ **x = 0, x = 1/8**
5. $9x^2 - 49 = 0$ **x = +/- 7/3**
6. $x^2 - 9x + 20 = 0$ **x = 4, x = 5**
7. $8x^2 + 15 = 22x$ (4x-5)(2x-3), **x = 5/4, x = 3/2**

complete the square:

8. $x^2 - 8x = 2$ $x = 4 +/-(18)^{1/2}$ **x = - 0.24, x = 8.24**

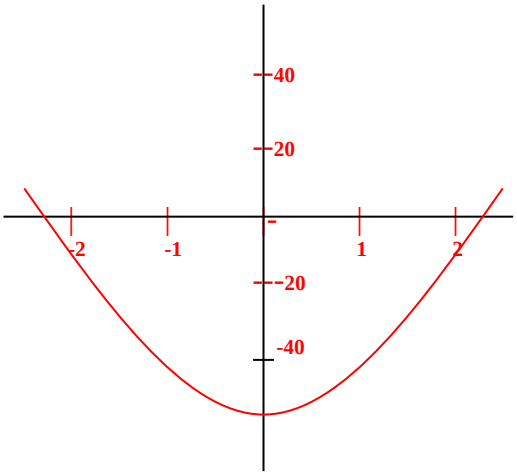
9. $4x^2 - 3x - 2 = 0$ $(x - 3/8)^2 = 41/64$, x = (3 +/-6.4)/8 = **-0.425, or 1.175**

formula: $\{x = (-b +/-(b^2 - 4ac)^{1/2})/2a\}$

10. $x^2 + 8x + 6 = 0$ $x = -4 +/-(64 - 24)^{1/2}/2$, **x = -7.16, x = - 0.84**

Sketch the Graphs - showing the co-ordinates of two points on each graph.

(5) $y = 9x^2 - 49$



(9) $y = 4x^2 - 3x - 2$