Solving Quadratic Equations

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| 1. You cannot solve a quadratic equation unless it is equal to zero. For the following you must rearrange the equations first and then solve:

Example:X2 + 2x – 7 = 81. Right side must be equal to 0, therefore we take away the 8 from both sides leaving us:

 X2 + 2x – 15= 01. Then factorise:

 Multiplies to make – 15 and adds to make +2 …. +5 and -3 (x+5)(x-3)=01. Either

 X+5=0 …. X=-5 OR  x-3=0 … x= 3 |
| a)$ x^{2}+10x=-24$ | b)$ x^{2}-18x=-32$ | c)$ x^{2}+2x=24$ |
| d)$ x^{2}+3x=54$ | e)$ x^{2}+7x=30$ | f)$ x^{2}-7x=44$ |
| g)$ x^{2}-x=72$ | h)$ x^{2}=17x-72$ | i)$ x^{2}+1=2x$ |
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