**Difference of Two Squares**

Factorise these…

|  |  |  |
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| 1. $x^{2}-25$
2. $x^{2}-49$
3. $x^{2}-81$
4. $4x^{2}-81$
5. $100-4x^{2}$
6. $121-100x^{2}$
7. $x^{2}-y^{2}$
 | 1. $9x^{2}-100y^{2}$
2. $a^{2}b^{2}-c^{2}d^{2}$
3. $a^{2}b^{2}-100b^{2}c^{2}$
4. $a^{4}-b^{6}$
5. $16a^{4}-49b^{6}$
6. $49a^{2}b^{4}-100a^{6}b^{8}c^{10}$
7. $16x^{2}-225y^{2}$
 | 1. $2x^{2}-5y^{2}$
2. $5x^{2}-45$
3. $7x^{2}-28$
4. $32-2x^{2}$
5. $2x^{3}y-8xy^{3}$
6. $\left(x+1\right)^{2}-\left(x+2\right)^{2}$
7. $9\left(x+1\right)^{2}-16\left(x+2\right)^{2}$
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**Difference of Two Squares - Answers**

Factorise these…

|  |  |  |
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| 1. $(x+5)(x-5)$
2. $(x+7)(x-7)$
3. $\left(x+9\right)\left(x-9\right)$
4. $\left(2x+9\right)\left(2x-9\right)$
5. $\left(10+2x\right)\left(10-2x\right)$
6. $\left(11+10x\right)\left(11-10x\right)$
7. $\left(x+y\right)\left(x-y\right)$
 | 1. $\left(3x+10y\right)\left(3x-10y\right)$
2. $\left(ab+cd\right)\left(ab-cd\right)$
3. $\left(ab+10bc\right)\left(ab-10bc\right)$
4. $\left(a^{2}+b^{3}\right)\left(a^{2}-b^{3}\right)$
5. $\left(4a^{2}+7b^{3}\right)\left(4a^{2}-7b^{3}\right)$
6. $(7ab^{2}+10a^{3}b^{4}c^{5})(7ab^{2}-10a^{3}b^{4}c^{5})$
7. $\left(4x+15y\right)\left(4x-15y\right)$
 | 1. $(\sqrt{2}x+\sqrt{5}y)(\sqrt{2}x-\sqrt{5}y)$
2. $5(x+3)(x-3)$
3. $7(x+2)(x-2)$
4. $2(4+x)(4-x)$
5. $2xy(x+2y)(x-2y)$
6. $-(2x+3)$
7. $-(x+5)(7x+11)$
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