

Video 8: Solve by applying the quadratic formula

1. $2x^{2}+11x+5=0$
2. $3x^{2}-10x+3=0$
3. $x^{2}=6-x$
4. $x\left(x+10\right)=-21$

Video 10: Sketch the following quadratic functions

1. $y=x^{2}-5x+6$
2. $y=-12x^{2}+16x-5$
3. $y=-x^{2}+16$
4. $y=2x^{2}-3x$

Video 11: Solve the following quadratic inequalities

1. $x^{2}-5x+6>0$
2. $-12x^{2}+16x-5\geq 0$
3. $-x^{2}+16>0$
4. $2x^{2}-3x\leq 0$

Video 6: Solve by completing the square

1. $x^{2}+10x+21=0$
2. $8x^{2}-10x-3=0$

Video 5: Solve the following incomplete quadratics by separating the $x^{2}$ term from the other

1. $x^{2}-9=0$
2. $9x^{2}-4=0$
3. $1-9x^{2}=0$

Video 4: Solve the following incomplete quadratic equations by factorising

1. $3x^{2}-x=0$
2. $10x^{2}-55x=0$
3. $x^{2}=6x$
4. $4x^{2}-1=0$
5. $36x^{2}=16$

Video 3: Solve the following quadratic equations by factorising

1. $x^{2}-4x-5=0$
2. $2x^{2}-3x-2=0$
3. $x^{2}-5x=-6$
4. $2x^{2}=15-7x$

Video 2: Factorise the following incomplete quadratic expressions

1. $x^{2}-3x$
2. $x^{2}+7x$
3. $x^{2}-49$
4. $9x^{2}-4$
5. $4x^{2}-1$

Video 1: Factorise the following quadratic expressions

1. $2x^{2}+7x+3$
2. $x^{2}-5x-24$
3. $2x^{2}-x-15$
4. $3x^{2}+8x+4$
5. $3x^{2}-11x+6$

Work Sheet:

