**Gr. 11 MATHEMATICS 2016 REVISION EXERCISES**

**ALGEBRA AND EQUATIONS AND INEQUALITIES 45 marks from PAPER 1**

**PART B: EQUATIONS, INEQUALITIES, ETC.**

1. Solve for *x*:

1.1 

1.2 

1.3 

1.4 

1.5 

1.6 

1.7 

1.8 

1.9 

1.10 

1.11 

1.12 

1.13 

1.14 

2. If , determine *y* if

2.1 

2.2 

3. Given . Determine the value(s) of *x* for which P will be

3.1 equal to zero;

3.2 undefined;

3.3 real

3.4 positive

4. Solve simultaneously for *x* and *y*:

4.1 

4.2 

4.3 

5. Determine the nature of the roots of

5.1 

5.2 

5.3 

5.4 

6. For which value(s) of *p* will the roots of  be non-real?

7. For which value(s) of k does the equation  have equal roots?

**8. Questions from DBE CAPS Gr. 11 Papers:**

8.1 Exemplar 2013 Paper 1

no. 1.1; 1.3; 2.1; 2.3 and 3.1.

8.2 Nov. 2014 Paper 1

no. 1.1.1; 1.1.2; 1.1.4; 1.2 and 3

8.3 Nov. 2015 Paper 1

no. 1.1.1; 1.1.4; 1.2; 1.3 and 2.2

8.4 Nov. 2016 Paper 1

 no. 1

**Gr. 11 MATHEMATICS 2016 ANSWERS to REVISION EXERCISES**

**ALGEBRA AND EQUATIONS AND INEQUALITIES 45 marks from PAPER 1**

**PART B: EQUATIONS, INEQUALITIES, ETC.**

* 1. 0; 3
	2. 
	3. 1.3
	4. no solution
	5. 
	6. 
	7. 
	8. 
	9. no real roots 
	10. 
	11. 
	12. 
	13. 
	14. 

2.1 

2.2 

3.1 3

3.2 

3.3 

3.4 

4.1 

4.2 

4.3 

5.1 real, irrational, unequal

5.2 real, rational, equal

5.3 real, rational, unequal

5.4 not real

6. 

7. 

**8.1 Exemplar 2013 Paper 1:**

1.1.1 

 1.1.2 

1.3.1 3

 1.3.2 

2.1.1 

2.1.2 

2.3 

3.1.1 ½

3.1.2 

**8.2 Nov. 2014 Paper 1:**

1.1.1 

 1.1.2 

 1.1.4 

 1.2 

 3. 6 cm

**8.3 Nov. 2015 Paper 1**

1.1.1 – 4; 3

 1.1.4 

 1.2.1 0,73; – 1,93

 1.2.2 

 1.3 

 2.2.1 

 2.2.2 2

**8.4 Nov. 2016 Paper 1**

 1.1.1 1,85; – 0,18

 1.1.2 4; 2

 1.1.3 $x<0 or x>2$

1.1.4 $\frac{2}{3}$

1.1.5 10

1.2 $x=-3;y=-7 or x=2;y=8$