

# Port Shepstone Islamic School

## Term 1

GRADE 10



Mathematics

Total: 60

## Revision Class Activity

### Factorisation

Examiner: B Gundani

Time: 1 Hour

Moderator: E Nnuroh

Date: 27 January 2019

- Answer all questions
- Factorise the following

#### QUESTION 1

1.1  $3a + 3b$

1.2  $-5x + 5y$

1.3  $-a - 3b$

1.4  $-2x + y$

1.5  $10a^2 - 5a^2b$

1.6  $\frac{1}{5}m - 5$

1.7  $\frac{1}{2}a^2 - 8ab$

1.8  $6x - \frac{1}{3}$

1.9  $8m - 2$

1.10  $x^2 + x$

#### QUESTION 2

2.1  $36 - a^2$

2.2  $9b^2 - 4c^2$

2.3  $100 - y^2$

2.4  $28x^3 - 63xb^2$

2.5  $9x^2(2a - b) - 16(2a - b)$

2.6  $\frac{1}{3}x^2 - 3$

2.7  $2x^8 - 2y^4$

2.8  $(2x + 3y)^2 - 9$

2.9  $3k(k^2 - m^2) - 3k(m - k)$

2.10  $25a^2(a - 3b) + 9(3b - a)$

**QUESTION 3**

- 3.1  $x^2 + 4x + 3$   
3.2  $x^2 + x - 12$   
3.3  $x^2 + 7x + 12$   
3.4  $2x^2 - 14x + 24$   
3.5  $5x^2 + 35x + 50$   
3.6  $4p^2 - 4p + 1$   
3.7  $18x^2 - 5x - 2$   
3.8  $6x^2 - 33x + 15$   
3.9  $(x + 3)^2 - 3(x + 3) - 4$   
3.10  $(x - 5)^2 - 5(x - 5) + 6$

**QUESTION 5**

- 5.1  $4m - 4n + am - an$   
5.2  $3xy + 6xz - 5y^2 - 10yz$   
5.3  $m^2 - 9n^2 - 3km + 9kn$   
5.4  $ax - bx + ay - by - a + b$   
5.5  $3x - 6xy - 2y + 1$   
5.6  $6m^2 - 2mn - 3mp + np$   
5.7  $3x^2 - 2xy + 2y^2 - 3xy$   
5.8  $x^3 - x^2y + y^3 - xy^2$   
5.9  $2x^3 - 18xy^2 - 2x^2 + 6xy$   
5.10  $a^2 - 5ap + 15bp - 9b^2$

**QUESTION 4**

- 4.1  $a^2 - ab - 2b^2$   
4.2  $a^2 - 4ab + 4b^2$   
4.3  $m^2 + 4mn + 3n^2$   
4.4  $x^2 - 3xy + 2y^2$   
4.5  $4a^2 - 14ab + 12b^2$   
4.6  $18p^2 - 12pr + 2r^2$   
4.7  $8h^2 + 13hq - 6q^2$   
4.8  $6a^2 - ab - 15b^2$   
4.9  $6x^2y - 36xy^2z - 24yz^2$   
4.10  $12m^2 - 19mn + 5n^2$

**QUESTION 6**

- 6.1  $216m^3 - n^3$   
6.2  $x^3 + 8y^3$   
6.3  $8a^3 + 27$   
6.4  $\frac{1}{27}a^6 - 8b^3$   
6.5  $125x^3 + 27$   
6.6  $8a^3b^3 - 27c^3$   
6.7  $64p^6 - 27$   
6.8  $k^{15} - 125$   
6.9  $40x^4 - 5xy^6$   
6.10  $a^4b - ab^4$

**Grand Total: 60**