Analytical Geometry: Lines & Inclination (Grade 11)

WORKSHEET

Name: ..... Class: .....

Date: .....

MARK ____ / 18

Answer all questions. Show all your working — marks are awarded for method as well as the final answer.

1 Determine the gradient of the line through A$(-1\ ;\ 2)$ and B$(3\ ;\ 10)$. **(2)**

2 Determine the equation of the line through A$(-1\ ;\ 2)$ and B$(3\ ;\ 10)$. **(3)**

3 Determine the length of AB where A$(-1\ ;\ 2)$ and B$(3\ ;\ 10)$. **(2)**

4 Determine the midpoint of AB where A$(-1\ ;\ 2)$ and B$(3\ ;\ 10)$. **(2)**

5 Determine the equation of the line through $(2\ ;\ 5)$ perpendicular to $y = 2x + 4$. **(3)**

6 Determine the equation of the line through $(0\ ;\ 1)$ parallel to $y = 2x + 4$. **(2)**

7 Determine the angle of inclination of $y = 2x + 4$ (one decimal). **(2)**

8 Determine the angle of inclination of a line with gradient -1. **(2)**

TOTAL: 18 marks

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