Year 10 Maths Assessment 3 Patterns and Graphs

For this assessment you are required to:

1. Create your own linear pattern. You can either draw it on paper or create one digitally (2D representation). For examples of linear patterns you can use the following resources:

Helpful search words - spatial patterns in maths
Helpful website -
https://www.google.com/search?q=linear+patterns&tbm=isch&hl=en&sa=X&ved=2ahUKEwj-xIKxmOjqAhWvlUsFHTqRBX4QrNwCKAJ6BQgBEKkC&biw=1245&bih=633&safe=active&ssui=on

2. From your linear pattern construct a table of values like the one given below.

EXAMPLE ONLY

n	1	2	3	4
P	1	3	5	7

(See if you can find a way to include some negative values in your table.)

3. Draw a linear graph using the values in your table. Your graph should show a horizontal and vertical axis and both negative and positive values.

4. Write the equation of a straight line (y=mx+c) for your linear graph. Explain what the different variables mean in the equation of a straight line and how did you find them. Also, identify the

relationship between the equation of a straight line and the points on the line.

TAAB FOR YEAR 10 ASSESSMENT 3 PATTERNS AND GRAPHS

Criteria	Working Towards	Working AT	Working Above	Working Beyond
Patterns and relationships	You have attempted to find and represent relationships in spatial patterns, using tables and graphs	You have found and represented relationships in spatial patterns, using tables and graphs	You have accurately found and represented relationships in spatial patterns, using tables, graphs and equation of a straight line	You have precisely found and represented relationships in spatial patterns, using tables, graphs and equation of a straight line
Time Management	You have yet to submit your assessment	You have not submitted the assessment on time	You have submitted the assessment on time	You have submitted the assessment on time
Overall	Working Towards	Working AT	Working Above	Working Beyond