Name: …… Date: ……..

Numerical Reasoning _ Equation of a line

Assessment Criterion: A and C

1. A straight line with gradient 6 passes through the point (3, 18).

Find the equation of the line in the form y=m x+ c.

2. Circle the equation of the line that is parallel to the x axis

$y = -6$ $x = 6$ $x + y = 3$

3. A straight line has gradient 5 and passes through the point (3, 16)

A student claims that equation of a line is y=5x+3.

Verify if the student's statement is correct or not.

4. Match each equation with gradient and y intercept:

Equation of a line	Gradient & Y intercept
$y = 3x$	Gradient is 0.3 & y intercept is 7
$y = 3x - 5$	Gradient is 3 & y intercept is -5
$y = 0.3x + 7$	Gradient is 3 & y intercept is -0

5. A phone plan charges a fixed monthly fee plus a cost per gigabyte of data used. A customer who uses 5 GB pays 650 THB, while a customer who uses 10 GB pays 900 THB.

a) Calculate the gradient (THB per GB).

b) Determine the y-intercept (monthly base fee).

c) Write the linear cost model $D(x)$

d) How much would 15 GB cost?