



Year 11 Mathematics Applications (AEMAA)

Test 3 Semester 2 2021

SHENTON
COLLEGE

Name: _____

Teacher: Day Friday Hill Kelly Loh Staffe

CALCULATOR FREE

Materials allowed: Formula sheet

Show full working to obtain full marks for each of the questions in this section.

Time: 15 minutes

CF	/24
CA	/40
Units Deduction	
Total	/64

Question 1 [5 marks: 2,3]

Solve the following equations for the unknown variable.

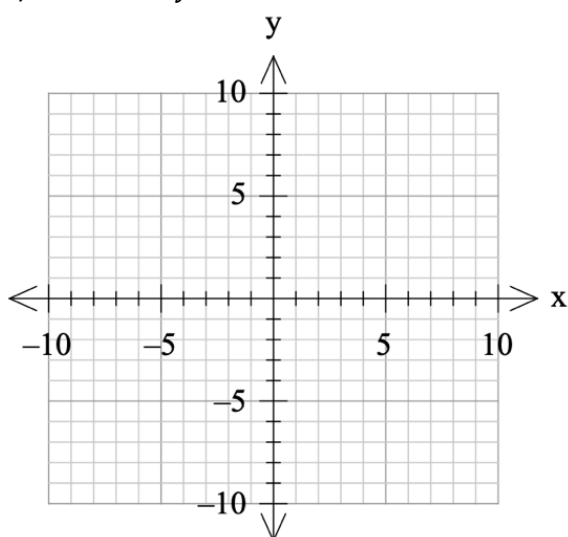
a) $2x - 12 = 3$

b) $-3(x - 2) - 5 = 10$

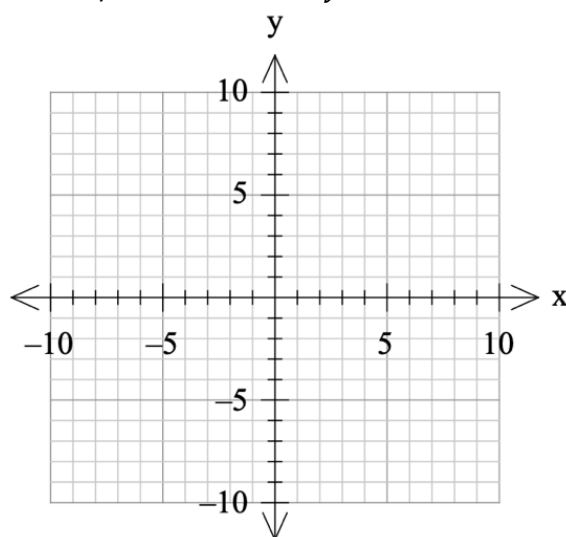
Question 2 [8 marks: 4, 4]

a) Draw the following straight lines on the axes below.

i) $y = -x + 2$



ii) $-4x + 2y = 8$



b) For each linear equation, state the below.

i) $y = -x + 2$

Gradient _____

Y-intercept _____
(as a co-ordinate)

ii) $-4x + 2y = 8$

Gradient _____

X-intercept _____
(as a co-ordinate)

Question 3 [2 marks]

Show working to determine whether or not the point (4, 9) will lie on the line $y = -4x - 7$.

Question 4 [3 marks]

Find the equation of the straight line that passes through the two points (2, -1) and (7, -16).

Question 5 [6 marks: 3, 3]

Solve the following simultaneous equations algebraically:

a) $x = 2y + 2$
 $x + y = 8$

b) $2x - 4y = 8$
 $x - 3y = 3$

END OF TEST