

National 4 Expressions NAB Part 1 Practice Test (1)

(1) Simplify $12x + 2y - 9x + 3y$

(2) Expand and simplify $8(3x + 4)$

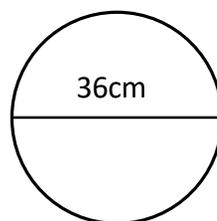
(3) Factorise $3x + 24$

(4) When $g = 4$ and $h = 2$ Find $2g + 3h$

(5) This circle has a diameter of 36cm

(a) Calculate the circumference of the circle ($C = \pi d$)

(b) Calculate the area of the circle ($A = \pi r^2$)



(6) Copy and complete the table

Tables (T)	1	2	3	4	5	30
Seats (S)	4	6	8				

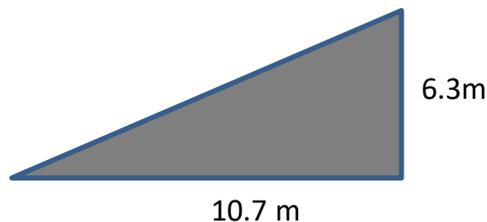
(a) Write down the formula connecting seats (S) with the tables (T)

(b) How many tables are required for 102 seats?

(7) Council regulations state that the gradient of a ramp must be no more than 0.8

(a) Calculate the gradient of the ramp

(b) Does the ramp meet the regulations ?



National 4 Expressions NAB Part 1 Practice Test (2) **ANSWERS**

(1) $3x + 5y$

(2) $24x + 32$

(3) $3(x + 8)$

(4) $2(4) + 3(2) = 8 + 6 = 14$

(5) (a) $C = 113.04\text{cm}$ (b) $A = 1017.36\text{ cm}^2$

(6) Copy and complete the table

Tables (T)	1	2	3	4	5	30
Seats (S)	4	6	8	10	12		62

(a) $S = 2T + 2$

(b) 50 tables

7 (a) $m = 0.589$ (b) Yes it meets the regulations as 0.589 is less than 0.8