MARKAH :

MATEMATIK
TINGKATAN 2
BAB 3 : RUMUS ALGEBRA

13 (*a*) Rajah 4 menunjukkan kad-kad yang berlabel dengan ungkapan algebra.
Diagram 4 shows cards labelled with algebraic expressions.

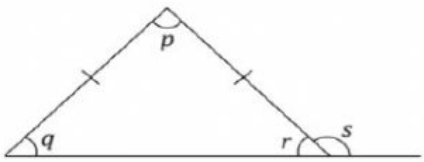
$2tu + 4tu$	
$q^2 = 3x + 2y$	$2mx + c$
$pqr + rs$	$y^3 + 3 = x^2 + 2$

Rajah 4/ *Diagram 4*

Isikan petak kosong pada ruang jawapan dengan rumus algebra dari Rajah 4.
Fill in the boxes in the answer space with algebraic formulae from Diagram 4.
[2 markah/ *marks*]

Jawapan/ *Answer*:

(*b*) Rajah 5 menunjukkan sebuah segi tiga sama kaki.
Diagram 5 shows an isosceles triangle.



Rajah 5/ *Diagram 5*

Pilih **dua** rumus algebra yang betul dan tandakan (✓) pada ruang jawapan.
*Choose **two** correct algebraic formulae and mark (✓) in the answer space.*
[2 markah/ *marks*]

Jawapan/ *Answer*:

$p + q = s$	
$180° - p = q$	
$p + q + r = 180°$	
$s - r = p$	

14 (*a*) Rajah 6 menunjukkan satu rumus algebra.
Diagram 6 shows an algebraic formula.

Isi padu sfera/ *Volume of sphere*:
$$V = \frac{4}{3}\pi j^3$$

Rajah 6/ *Diagram 6*

Nyatakan perkara rumus.
State the subject of formula.
[1 markah/ *mark*]

Jawapan/ *Answer*:

(*b*) Padankan rumus algebra berikut kepada rumus algebra yang sepadan.
Match the following algebraic formulae to its corresponding algebraic formula.
[3 markah/ *marks*]

Jawapan/ *Answer*:

$pq - 3 = \frac{p}{4} - 3q$	$p = \frac{12 - 12q}{4q - 1}$
$\frac{2}{p - q} = \frac{p + q}{2}$	$p = -\frac{5q}{4q - 2}$
$\frac{2p}{q} - 5 = 4p$	$p = \frac{3q}{2}$
	$p = \sqrt{4 + q^2}$

15 (*a*) Rajah 7 menunjukkan satu rumus algebra.
Diagram 7 shows an algebraic formula.

$$M_1V_1 = M_2V_2$$

Rajah 7/ *Diagram 7*

Tandakan (✓) bagi nilai pemboleh ubah yang menepati rumus algebra itu.
Mark (✓) for the values of variables which satisfy the algebraic formula.
[2 markah/ *marks*]

Jawapan/ *Answer*:

M_1	M_2	V_1	V_2	(✓)
2	6	3	2	
3	5	10	6	
15	2	6	45	