

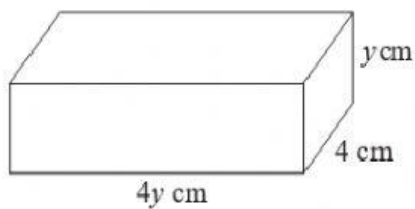
SUBJECT: MATHEMATICS
TEST 3: ALGEBRAIC FORMULÆ
CLASS: 2 ADIL

TIME: 20MIN

MARKS: 10

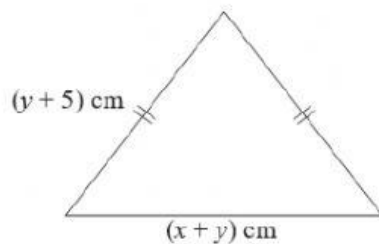
SECTION A

1.



- A. $16y$
- B. $8y$
- C. $8y^2$
- D. $16y^2$

2.



- A. $x + 3y + 10$
- B. $x + 10y + 3$
- C. $10 + 3y + x$
- D. $3y + x + 10$

3. Given $L = \frac{1}{2} t (a + b)$, find the value of L when $t = 6$, $a = 4$ and $b = 5$.

- A. 25
- B. 26
- C. 27
- D. 28

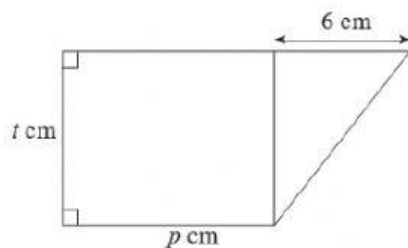
4. Given $2p = \sqrt{q + r}$, find the value of r when $p = 3$ and $q = 15$.

- A. $r = 20$
- B. $r = 21$
- C. $r = 22$
- D. $r = 23$

5. Given $\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$, find the value of u when $f = 10$ and $v = 15$.

- A. $u = 20$
- B. $u = 25$
- C. $u = 30$
- D. $u = 35$

6.



The diagram consists of a rectangle and a right – angled triangle. The area of the diagram is $A \text{ cm}^2$.

- A. $t + 3$
- B. $t + 6$
- C. $pt + 6t$
- D. $pt + 3t$

7. Express the variable in the brackets as the subject of the formula.

$$y = 4x - 5$$

- A. $y + 5$
- B. $y + 4$
- C. $x = \frac{y+5}{4}$
- D. $y = \frac{x+4}{5}$

8. Express the variable in the brackets as the subjects of the formula.

$$x^2 = y^2 + z^2$$

- A. $z = \sqrt{x^2 - y^2}$
- B. $z = \sqrt{x^2 + y^2}$
- C. $z = \sqrt{y^2 - x^2}$
- D. $z = \sqrt{y^2 + x^2}$

9. Given $L = 4pq - 3p$, find the value of q when $L = 34$ and $p = 2$.

- A. $q = 5$
- B. $q = 10$
- C. $q = 15$
- D. $q = 20$

10. Given $v^2 = u^2 + 2as$, find the value of u when $v = 10$, $a = 2$ and $s = 9$.

- A. 36
- B. 64
- C. 7
- D. 8