

S.2 MATHEMATICS ONLINE TEST:

INSTRUCTIONS:

- Answer all questions.
- Send your answer sheets to whatsapp number 0706741293 or email okumujoackim@gmail.com

Question one:

Simplify the following

- (i) $3\sqrt{32} + \sqrt{8} - \sqrt{72}$
(ii) $\sqrt{75} + \sqrt{50} - \sqrt{18} + \sqrt{12}$

Question two:

Express the following in the form $a + b\sqrt{c}$.

- (i) $(3 + 2\sqrt{3})(1 - \sqrt{3})$
(ii) $\frac{4}{3-2\sqrt{2}}$

Question three:

- (a) Given that $\frac{1}{4+3\sqrt{5}} = a + b\sqrt{5}$. Find the value of a and b .
(b) If $\frac{2}{5\sqrt{3}} = a\sqrt{3}$, find a .

Question four:

- (a) (i) Determine the gradient of a line passing through the points $(-4, 0)$ and $(5, 3)$.
(ii) Hence determine the equation of the line in (i) above.
(b) Find the equation of a line passing through $(-1, -1)$ and parallel to the line $y - 3x + 4 = 0$

END