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| **Gatitu Mixed Secondary School** | | | | |
| **Form 3** | **Term 1** | **121 A - Mathematics** | **07-Jan-16** | **Opener** |

1. Use mathematical tables to evaluate. Give your answer to 3 sign figures. 3mks

2.935 × 0.0765)

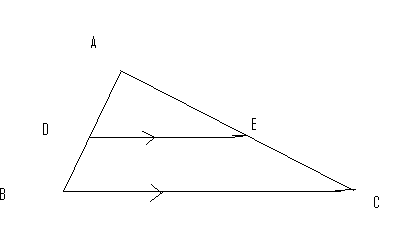
32.74

1. Solve for x in the equation 3mks

812X × 27X = 729

9X

1. A straight line passes through points A (-3, 8) and B (3,-4) and parallel to AB. Give the answer in the form y = mx + c where m and c are constants. 3mks
2. In the triangle ABC shown below DE is parallel to BC. If AE =3 cm and EC =2cm, determine the ratio of the area of the triangle ADE to that of triangle ABC. 2mks

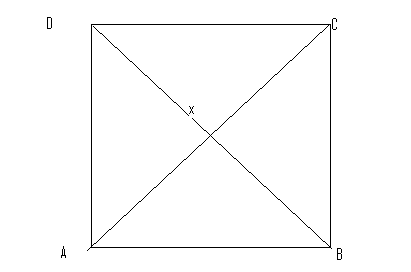


1. Solve the simultaneous equations. 3mks

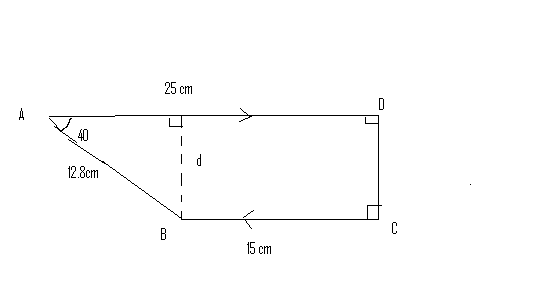
3X -2Y =7

5X + Y =3

1. In the fig. ABCD is a rhombus whose diagonals AC and BD meet X. Given that AC = 27.6 cm and BD = 16.2cm. Calculate the area of the rhombus. 2mks



1. A farmer has twice as many goats as cows and two thirds as many pigs as goats.
2. If he has x cows, write down a simplified expression in x for the total number of animals .1mk
3. Find the total number of animals given that the farmer has 20 pigs. 3mks
4. Calculate the area of the trapezium. 3mks



1. Simplify the following expression by reducing it to a single fraction 2mks

2x -3 - x -2 - 1 –x

3 2 4

1. It would take 15 men 8 days to dig a trench 240m long find how many days it would take 18 men to dig a trench 360 m long working at the same rate. 3mks
2. A trader sold an article at 15% discount to a customer who paid sh. 510 for it. What was the marked price of the article? 2mks
3. Solve for x in the equation 3mks

2(3x -2) × 8x = 4 (x +1)