

KISIRIRI SECONDARY SCHOOL
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CAT TWO OF THIRD TERM 2013

Form one mathematics

40 minutes

1. Cheronno spent Sh. 207 to buy seven books and four pencils While Kibet spent 165 to buy five books and five pencils of the same type. Find the cost of each item. (3mks)

2. The table below shows exchange rates between the Kenyan shilling and the Japanese Yen. A Japanese tourist Mr. Chung exchanged 1,000,000 Yen into Kenyan shillings. At the end of his holiday he exchanged a quarter of the Kenyan shillings remaining back to the Japanese Yen. How many Japanese yen did he get? (3mks)

	Buying	Skilling
Japanese Yen	0.63	0.65

3. A certain amount of money was shared among 3 children in the ratio 7:5:3 the largest share was Kshs 91. Find the

(a) Total amount of money (2mks)

(b) Difference in the money received as the largest share and the smallest share. (1mk)

4. Solve the simultaneous equations below using the substitution method. (3mks)

$$2x - 3y = 5$$

$$-x + 2y = -3$$

5. A bus left Nairobi on Thursday evening and traveled to Dar-es-salam according to the travel time table below and arrived there on Saturday morning.

Nairobi	Dep 2015 h
Namanga	Arr: 2325h
	dep: 0310h
Arusha	Arr: 0640h
	Dep: 0820h
Dodoma	Arr: 2100h
	Dep: 2255h
Dar – es – Salam	Arr: 1015h

Determine the total

i) Traveling time for the whole journey

(2mks)

ii) Stoppage time in all stations

(2mks)

iii) Time taken for the whole journey

(2mks)

b) Given that the average speed of the bus for the whole journey is 60km/h, calculate the distance between Nairobi and Dar-es- salaam (2mks)

6. The tables below represent linear relations between x and y . In each table some values of y against x are given and the corresponding point (x, y) also given.

$$2x - y = 3$$

x	-4	-2	0	3	5	7	8
$y=2x-3$	-11				7		
Point	(-4,-11)				(5,7)		

$$3x - 2y = 4$$

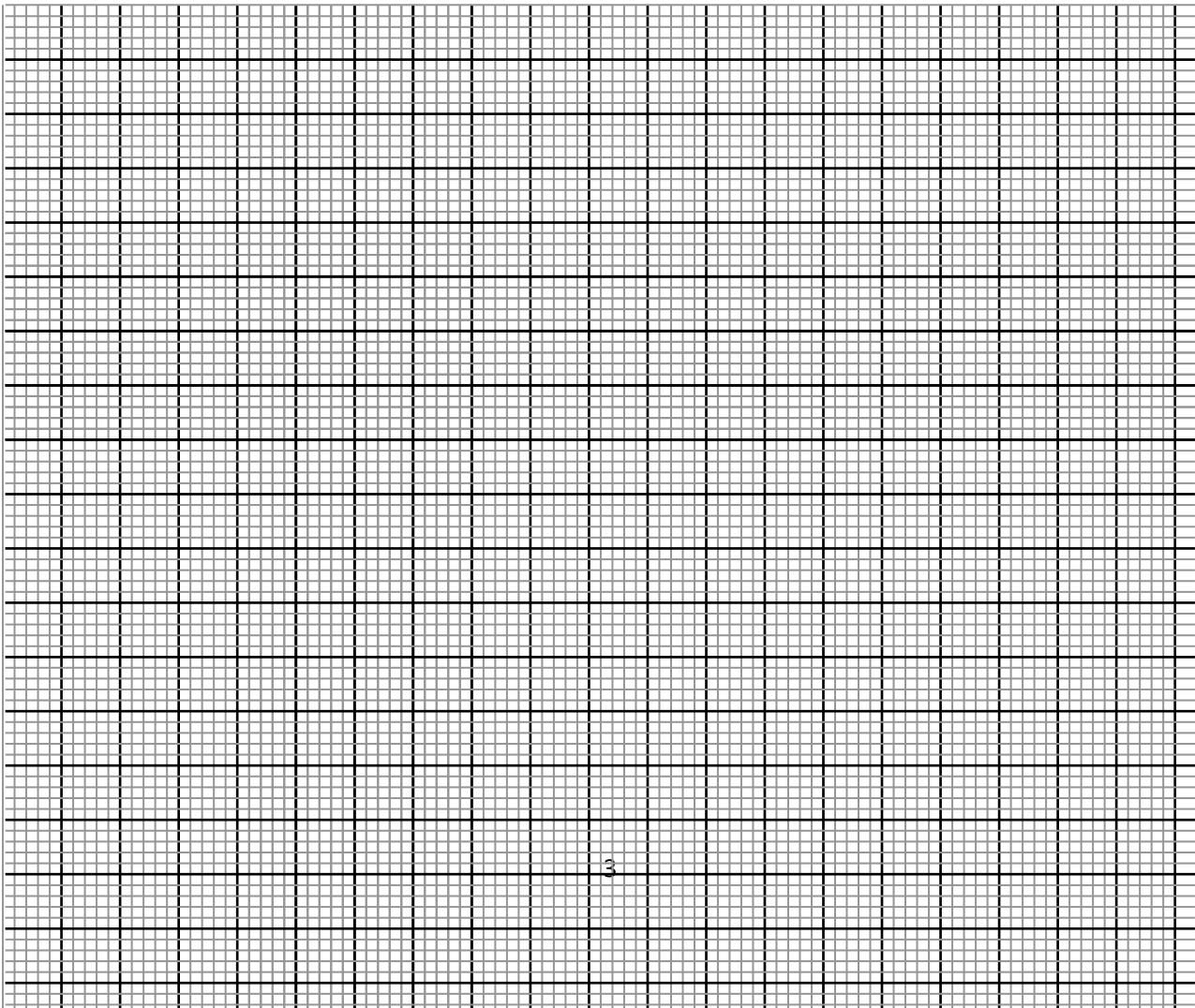
x	-2	0	2	4	6	8	10
$y=\frac{3x-4}{2}$		-2					13
Point		(0,-2)					(10,13)

Copy and complete each table

(2mks)

Using a suitable scale plot the points from each table on the same grid and hence draw the straight line representing each relation

(4mks)



Use your graph to solve the simultaneous equations

$$2x - y = 3$$

$$3x - 2y = 4$$

- d) The line whose equation is $2x - y = 3$ cut's the x - axis and the y - axis at P and Q respectively. From you graph state the coordinates of P and Q. (2mks)