Physics SS1.

1. The electrical appliances in a house are listed as follow: five 100w bulbs, TV 240w, fridge 200w, electric heater 120w, three ceiling fan rated at 150w. if the appliances are switch on for 13 hours every. Calculate the cost of electrical energy consumed in a month(30 days) if it is 5o kobo per unit
2. A 10Ω resistor is connected across a 5 volt power supply. What is the resulting current?
3. Mention 2 safety devices you know
4. Calculate the total resistance between X and Y for the following combinations of resistors.

(a)

10 

X

Y

20 

10 

(b)

10 

X

Y

10 

10 

10 

(d)

25 

X

Y

5 

20 

10 

(c)

20 

X

10 

4 

10 

5 

1 

1. An electric iron with heating element of resistance 60Ω is connected to the 240v mains. Calculate the electrical power produced

MATHEMATICS JSS1

1. Sole the following equations (a)4y – 6 = 6 (b) 8x -5 = 9 + x
2. Simplify the following (a) 3x + x + 5x – 8x + 7x (b) 8y + 17y – 6y + 2y
3. If y = 2, z =5 and w = 8; then (a) 3z + w = (b) 5y + 2z – w =
4. Complete the table below

|  |  |  |
| --- | --- | --- |
| Shape | Area | Perimeter |
| Rectangle |  |  |
| Circle |  |  |
| Square |  |  |
| Trapezium |  | \*\*\*\*\*\*\*\*\* |

1. Complete the table

|  |  |
| --- | --- |
| Plane shape | Solid shape |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Maths JSS2

1. Parallel Lines

a)

|  |
| --- |
|  |

8

b)

|  |
| --- |
|  |

9

c)

|  |
| --- |
|  |

10

2.

|  |
| --- |
|  |

1

3.

|  |
| --- |
|  |

2

4.

|  |
| --- |
|  |

3

1. A man is 2m tall observes a bird on top of a tree at an angle of 38⁰. If the distance between the man’s head and the bird is 25m, what is the height of the tree? Use scale drawing method to solve this question.
2. The interior angle of a hexagon are 120⁰, 2y⁰, (y + 30)⁰, 140⁰, (150-y)⁰ and 160⁰

PHYSICS SS2

1. Using ray diagram, show how the image is formed when an object is placed between the focal point and the center of curvature and also state the nature of the image formed
2. An object is placed 10cm in front of a concave mirror of focal length of 15cm, what is the position and the nature of the image formed.
3. State the properties of the nature of an image formed by a plane mirror
4. With the aid of a diagram explain the eclipse of the sun
5. Briefly define all the term associated with a mirror( either concave or convex)

– principal axis

–focal length

– pole

– center of curvature,

- radius of curvature

- apeture