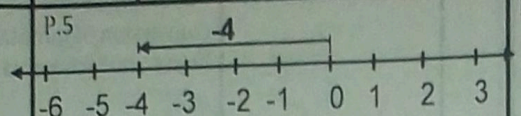
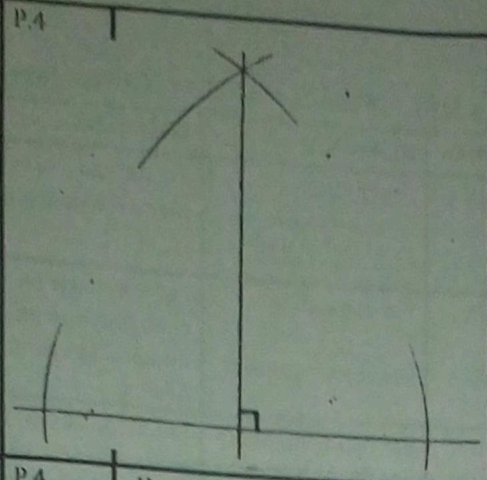
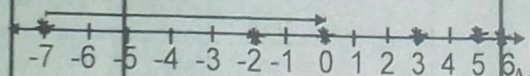
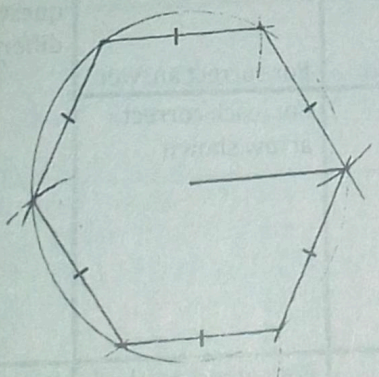
THE SIPRO PRIMARY SIX MATHEMATICS MID - TERM II MARKING GUIDE 2023.

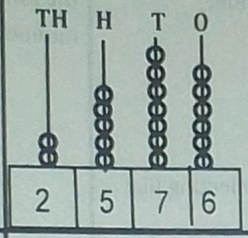
QN	LEVEL	SOLUTION	MRK	REASON	COMMENT
1	P.1	2 3 x 3 6 9	B_2	For the answer	Encourage learners to recite the multiplication table.
2	P.5	67 = 60 + 7 = LX VII = LXVII	B_1 B_1	For expanding For correct answer	Put emphasis on changing Roman numerals to Hindu - Arabic.
3	P.6	W∩ K = {1, 3, 6} n(W∩ K) = 3	B_1 B_1	For listing numbers For the number.	Put emphasis on types of sets.
4	P.5		B_2	For showing -4.	Help learners identify the right direction of negative and positive.
5	P.5	Let the cost of a pen be k. A pen k | a book k +sh500 | total sh 2500 k + k + sh 500 = sh 2500 2k + sh 500 = sh 2500 2k+sh500- sh500 = sh2500- sh500 $\frac{2k}{2} = \frac{\text{sh } 2000}{2}$ k = sh 1000	M_1 A_1	For formation of the equation For correct answer	Guide learners on how to form and solve equations.
6	P.4	5 + 5 + 5 + 5 + 5 + 5 + 2 32 children	B_2	For correct answer.	Help learners differentiate between tallies and bundles.
7	P.5	$\frac{2}{3} - \frac{1}{5} = (\frac{2}{3} \times \frac{5}{15}) - (\frac{1}{5} \times \frac{3}{15})$ $= \frac{10-3}{15}$ $= \frac{7}{15}$	M_1 A_1	For correct method For correct answer	Give learners more activities for practice. Accept any other method used.
8	P.5	$\sqrt{a^2} = \sqrt{36}$ $a = \sqrt{(2x2) \times (3x3)}$ a = 2 x 3 a = 6 2 | 36 2 | 18 3 | 9 3 | 3 1	M_1 A_1	For prime factorisation For correct answer	Guide learners on different areas how square roots are applied.
9	P.4	4phones cost sh 158000 1 phone will cost sh $\frac{158000}{4}$ 39500 Sh 39500	M_1 A_1	For correct method For correct answer	Develop a class shop and teach practically.

10	P.4		B_2	For correct construction.	Put emphasis on neatness and accuracy.
11	P.4	Hours Min 5 35 1r15 + 4 40 75 10 15 60 75	B_2	For correct answer	Put emphasis on conversion of minutes to hours and vice-versa.
12	P.5	1m = 100cm 4.5m = 4.5 x 100cm = $\frac{45}{10}$ x 100cm = 450cm	M_1 A_1	For correct method For the answer.	Put emphasis on conversion of metric units.
13	P.5	321_{five} $5 + 1 = 6 - 4$ $-\ 24_{five}$ $= 2$ 242_{five} $5 + 1 = 6 - 2$	M_1 A_1	For correct method For the answer.	Operate bases with and without regrouping.
14	P.5	{ }, {smart} , {phone} {TV}, {smart, phone} {smart, TV}, {phone, TV} {smart, phone, TV}	B_2	For listing all subsets .	Help learners to list clearly subsets and find them as well.
15	P.5	 -7, -2, 0, 3, 5, 6	M_1 A_1	For using the number line. For the answer.	Assist learners on how to arrange integers in both ascending and descending order.
16	P.4	K + k – 13 years = 37years 2k – 13years = 37years 2k – (13 + 13) years = (37+13)yrs $\frac{2k}{2}$ $= \frac{50^{35}}{2}$ K = 25yrs Nakibuka = 25yrs	M_1 A_1	For correct method For correct answer.	Put emphasis on formation of equations and solving them.
17	P.6	$\frac{3}{4} = 0.75$ 4 ⟌3.00 -0 3.0 -28 020	M_1	For correct method	Reject: $\frac{3}{4} = 0.75$ 4 ⟌3 4x0=-0 30 7x4=28

		the supplement be W $W + 110^0 = 180^0$ $W + 110^0 - 110^0 = 180^0 - 110^0$ $W = 70^0$	M_1 A_1	For correct answer. For the method. For correct answer.	Teach time practically. Help learners know different types of angles.
21a)	P.6	**SECTION B** $n(\Sigma) = 120$ $n(F) = 70$ $n(R) = 55$ $70 - K$ K $55 - K$ 20	B_1 B_1 B_1	For each correct entry.	- Teach practically - Help learners identify regions of sets. - Accept any other correct method.
b)		$K = (70 + 20 + 55) - 120$ $= 145 - 120$ $= 25$	B_1 B_1	For the method For 25.	
b)		$(70 - 25) + (55 - 25)$ people $45 + 30$ 75 people	B_1	For correct answer.	
22 a)	P. 6	$-3 - (-6)$ $-3 + 6$ 3	M_1 A_1	For correct method For correct answer	Expose candidates to a variety of related questions with different approaches.
b)		6steps upwards 8 steps downwords -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 current step $= -2$	B_1 B_1 B_1	For each correct arrow shown	
23a)	P.6	o t h | th 7.6 7 8 7.67 +0.01 7.68	M_1 A_1	For correct method For correct answer	Put emphasis on place values of decimals.

b)		$\frac{0.25 \times 0.6}{0.15} = \frac{25}{100} \times \frac{6}{10} \div \frac{(15)}{100}$ $= \frac{25}{100} \times \frac{6}{10} \times \frac{100}{15}$ $= \frac{5 \times 2 \times 1}{1 \times 1 \times 1}$ $= \frac{1}{1}$ $= 1$	M_1 M_1 A_1	For changing decimals to fractions For correct method For correct answer	Make enough practice on related members and involve other operations.
24a)	P.	**Sugar** | **milk** | **teacups** 2000 | 5000 Sh4000 x 5 | sh 2000 x 5 | sh 5000 x 5 2 1 | sh 10,000 | sh. 25,000 Sh 10,000 **Cups** | **Total expenditure** 5x sh5,000 | sh 25,000 Sh 25,000 | sh 15,000 Sh 10,000 + sh 10,000 Sh 60,000	B_1 B_1 B_1 B_1	For each correct product. For the sum.	Teach learners practically.
b)		sh. 60,000 + sh. 40,000 sh. 100,000	B_1 B_1	For the method For sh. 100,000	
25a)	P.6	Radius = $\frac{5}{2}$cm = 2.5cm 	R_1 J_1 C_1	For right radius For joining For correct construction.	Encourage learners to use a sharp pencil. Put emphasis on neatness.
b)		Perimeter = 6 sides = 5cm x 6 = 30cm	B_2	For correct answer	
26a)	P.5	Speed = $\frac{\text{Distance}}{\text{Time}}$ $= \frac{120\text{km}}{2\text{hour}}$ = 60km/hour	M_1 A_1	For correct method. For correct answer	Give learners more practice on finding speed, distance and time.

b)		Duration= ending time-starting time Hrs Min 10 30 - 8 30 2 00 = 2hours Distance = speed x Time = 80km x 2hrs 1hr = 160km	B1 M1 A1	For duration For correct method. For correct answer	
27a)	P.5	2a + 2a – a 4a – a 3a	M1 A1	For correct method. For correct answer	Expose learners to a variety of related questions with different approaches.
b)		3w – 6 = 18 3w – 6 + 6 = 18 + 6 3w = 24 $\frac{3w}{3} = \frac{24^8}{3}$ W = 8	M1 A1	For collecting like terms. For correct answer	
28a)	P.4	2,576 TH H T O 2 5 7 6	B1 B1	For correct numeral written in figure. For correct representation of the abacus	Put emphasis on place value and values.
b)		TH TTH H T O 7 6 5 2 1 one = 1 6X1000 = 6000 Sum = 6000 + 1 6,001	B1 B1 B1	For place value of 1 For value of 6 For the sum.	
29)	P.5	Thursday	B1	For the answer.	Help learners to find the scale before answering the questions.
b)		8^0c	B1	For correct answer	
c)		Monday, Saturday	B1	For correct answer	
d)		Average = $\frac{\text{sum of data}}{\text{No of data}}$ $= \frac{(14+8+12+20+18+14)}{6}$ $\frac{86}{6_3}$ 0c $= 14\frac{1}{3}$ 0c	M1 A1	For the method For correct answer	

b)		Duration= ending time-starting time Hrs Min 10 30 - 8 30 2 00 = 2hours Distance = speed x Time = 80km x 2hrs 1hr = 160km	B1 M1 A1	For duration For correct method. For correct answer	
27a)	P.5	2a + 2a – a 4a – a 3a	M1 A1	For correct method. For correct answer	Expose learners to a variety of related questions with different approaches.
b)		3w – 6 = 18 3w – 6 + 6 = 18 + 6 3w = 24 $\frac{3w}{3} = \frac{24^8}{3}$ W = 8	M1 A1	For collecting like terms. For correct answer	
28a)	P.4	2,576  	B1 B1	For correct numeral written in figure. For correct representation of the abacus	Put emphasis on place value and values.
b)		TH TTH H T O 7 6 5 2 1 one = 1 6X1000 = 6000 Sum = 6000 + 1 6,001	B1 B1 B1	For place value of 1 For value of 6 For the sum.	
29)	P.5	Thursday	B1	For the answer.	Help learners to find the scale before answering the questions.
b)		8^0c	B1	For correct answer	
c)		Monday, Saturday	B1	For correct answer	
d)		Average = $\frac{\text{sum of data}}{\text{No of data}}$ = $\frac{(14+8+12+20+18+14)}{6}$ $\frac{86}{6_3}$ 0c = 14 $\frac{1}{3}$ 0c	M1 A1	For the method For correct answer	

THE SIPRO PRIMARY SIX INTEGRATED SCIENCE MID TERM II MARKING GUIDE 2023

NO.	LEVEL	CORRECT RESPONSE	WRONG ANSWER	MARKING POINT	TECHNICAL ADVICE
1	P.5	Burning charcoal/ firewood/ paraffin/ petrol/ diesel/Electric bulb/oven/cooker	The sun, moon	Artificial sources of heat.	Practically illustrate the differer sources of heat.
2	P.6	Spores help a mushroom to reproduce.	Spores help a mushroom to grow.	Spores as gametes.	Emphasize parts of a fungus and their functions.
3	P.4	Both are used for breathing. / Both are breathing organs.	Both are used for respiration	Lungs and spiracles as breathing organs	Discuss different organisms with their breathing organs.
4	P.5	Personal hygiene.	Water and sanitation.	Washing clothes and ironing clothes are activities done to promote personal hygiene.	Comprehensively handle the different activities that promote each element of PHC
5	P.3	woofer/ radio/TV/ irons/ phones/DVD player	Chairs/ electric poles.	The question targeted devices which use electricity to operate.	Carry out a S practical approach to demonstrate how some of these devices work.
6	P.6	Cell division/ binary fission.	Asexual reproduction	Mode of reproduction other than type	Discuss and demonstrate budding.
7	P.5	A worker bee lacks an ovipositor while a queen bee has an ovipositor. /A worker bee is smaller than a queen bee.	A worker bee cleans the hive while a queen bee lays eggs.	Emphasis should be put on physical appearance differences not in their roles.	Clearly distinguish structural differences from functional differences.
8	P.4	Root nodules. /Nodules	Root caps. / Root hair	Characteristics of legumes.	Using real crops like beans, groundnuts, show children the different examples of legumes.
9	P.2	It causes lameness. /Causes paralysis of limbs. / Causes weakness of limbs.	High fever. / Leads to sickness. /Leads to death.	Emphasis should be put on the effects of polio to an individual.	Take children through the effects of different immunisable diseases e.g. untreated pertussis leads to choking, breathing may stop.
10	P.5	It helps in distillation of alcohol. / Distillation of water. / Rain formation.	For boiling water	Uses of physical changes.	Take children through different changes in the states of matter and their applications.
11	P.2	Nymph	Nif	Correct spelling	Clearly explain complete metamorphosis and incomplete metamorphosis.
12	P.5	There is less force of gravity on the moon while there is stronger gravity on the earth. /Due to less gravity on the moon than on earth.	The moon is very far from the earth.	Weight changes when measured in different places. / Accept a full comparison.	The weight of an object on the moon is less than its weight on earth.