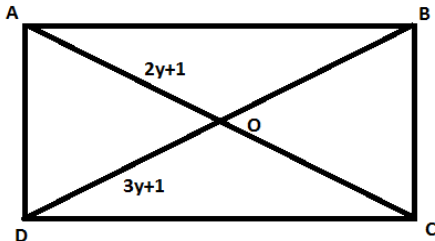
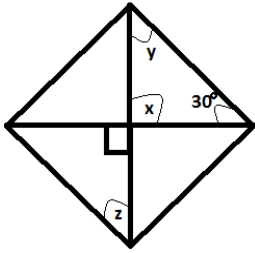


ITL Public School	
Summative Assessment - 1 (2014-15)	
Mathematics – Set A (answer key)	
Date:	Class: VIII
Time: 3 hours	M. M: 90
<i>General Instructions:</i> <ol style="list-style-type: none"> 1. Read the question paper carefully and answer legibly. 2. All questions are compulsory. 3. The question paper consist of 31 questions divided into four sections A,B,C and D 4. Section A comprises of 4 question of 1 mark each, section B comprises of 6 questions of 2 marks each, Section C comprises of 10 questions of 3 marks each and Section D comprises of 11 questions of 4 marks each 5. Use of calculators is not permitted. 	

Section – A														
Q1.	Without adding find the sum of: $1 + 3 + 5 + 7 + 9 + 11 + 13 = 49$	1												
Q2.	$X=2$	1												
Q3.	$1/2$	1												
Q4.	Correct figure	1												
Section – B														
Q5.	<ol style="list-style-type: none"> 1. Drawing the base (1/2) 2. Drawing 90° on both ends (1/2) 3. Marking 6 cm (1/2) 4. Complete square and labelling (1/2) 	2												
Q6.	If x and y vary directly then complete the given table (0.5 mark each)	2												
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">X</td> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;">5</td> </tr> <tr> <td style="padding: 5px;">Y</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;">10</td> <td style="padding: 5px;">15</td> <td style="padding: 5px;">20</td> <td style="padding: 5px;">25</td> </tr> </table>	X	1	2	3	4	5	Y	5	10	15	20	25	
X	1	2	3	4	5									
Y	5	10	15	20	25									
Q7.	$\frac{6(3)-4}{9(3)+1} = \frac{14}{28} \quad (1)$ $\text{LHS=RHS} \quad (1)$	2												
Q8.	$N \times 45 = 360^\circ \quad (1)$ $n=8 \quad (1)$	2												
Q9.	$5/6 + \frac{3}{2}$	2												
Q10.	Find the square root of 18225. $3 \times 3 \times 3 \times 5 = 135$	2												
Section – C														
Q11.	There are 25 blue balls, 20 green balls and 15 red balls. Find the probability of getting <ol style="list-style-type: none"> 1) A blue ball = $5/12 \quad (1)$ 2) A ball which is not red = $3/4 \quad (1)$ 3) A green ball = $1/3 \quad (1)$ 	3												
Q12.	Construct a Quadrilateral MNOP where $MN= 6.2$ cm, $NO = 5.6$ cm, $MP = 8$ cm, $\angle M = 85^\circ$ and $\angle N = 120^\circ$. 1.Rough sketch (0.5) 2.Base (0.5)	3												

	3. Angles (1) 4. Complete quadrilateral(1)	
Q13.	A bus fare for 112 km is Rs. 728. How much will be the fare for 240 km? Bus fare for 112km is 728 (0.5) Bus fare for 1 km is $728/112 = 6.5$ (1) Bus fare for 240 km is $6.5 * 240 = \text{rs.} 1560$ (1.5)	3
Q14.	a) The smallest member of a Pythagorean triplet is 16. Find the other two members. $M=8$ (0.5) therefore, Pythagorean triplet are 8,63,65 (1.5) b) How many numbers lie between the square of 25 and $26 = 50$ (1)	2 1
Q15.	By which smallest number should we divide 1188 to make it a perfect cube? Find the cube root of number so obtained. 1188 should be divided by 44 (2 marks) cube of $27=3$ (1)	3
Q16.	1. Rough sketch (0.5) 2. Diagonals (0.5) 3. Sides (1.5) 4. Complete rhombus (0.5)	3
Q17.	Solve for m $\frac{6}{2m-(3-4m)} = \frac{2}{3}$ $18=4m-(6-8m)$ (1.5) $24=12m$ (1) $m=2$ (0.5)	3
Q18.	In the given rectangle ABCD AC and BD are diagonals. If $AO = 2y+ 3$ and $DO = 3y+1$. Find the length of the diagonal.  1. Rectangle property (1 mark) 2. $AO=DO$ 3. $Y=2$ 4. Diagonal =14cm (1 mark)	3
Q19.	Using properties solve 1) $\frac{16}{21} \times \frac{14}{23} + \frac{16}{21} \times \frac{9}{23}$ $\frac{16}{21} * \frac{23}{23} = \frac{16}{21}$ (1.5) 2) $\frac{2}{3} \times \frac{-3}{12} - \frac{5}{6} + \frac{5}{12} \times \frac{2}{3}$ $\frac{2}{3} * \frac{2}{12} - \frac{5}{6} = \frac{26}{36}$ (1.5)	3
Q20.	The following table shows the pulse rate of a group of 50 people	3

	Pulse Rate (Beats per min)	Number of people (frequency)				
	60 – 65	4				
	65-70	12				
	70- 75	20				
	75-80	10				
	80-85	4				
	Represent this information in the form of a Histogram.					
	Preparation of a histogram (each bar 0.5 mark)					
	Section – D					
Q21.	Find the cube root of i) 15625 ($5 \times 5 = 25$) ii) 110592 ($3 \times 2 \times 2 \times 2 = 48$)			4		
Q22.	Father's present age is 4 times Soham's age. After 5 years, Father's age will be three times Soham's age. Find their present ages. Let sohan's age be X than , The fathers age be 4X (0.5) A.T.Q. , $3(X+5) = 4X+5$ (1.5) $X=10$ (0.5)			4		
Q23.	Find the smallest square number that is divisible by each of the numbers 8,15 and 20. 2,5,3 ARE NOT IN PAIRS 30 IS NOT A PERFECT SQUARE $120=2 \times 2 \times 2 \times 5 \times 3$			4		
Q24.	Construct a Quadrilateral PQRS where $PQ = 6.8$ cm , $QR = 7$ cm , $\angle P = 110^\circ$ $\angle Q = 70^\circ$ and $\angle R = 130^\circ$ 1. ROUGH SKETCH (0.5) 2.BASE (0.5) 3.ANGLES (1.5) 4.SIDES (1) 5.COMPLETE QUADRILATERAL (1)			4		
Q25.	The table shows the choice of food of a group of people					
	Favorite food	North Indian	South Indian	Chinese	others	Total
	Central angles	90	125	75	75	360
	Represent the above information with the help of a Pie chart. (pie chart 2 marks table 2 marks)					
Q26.	The students of class VIII collected some money foran orphanage. Each member gave as many rupees as there were members. If the total collection was Rs. 1764, how many members were there in the class? let the no. of students ad their donations be X $X \times X = 1764$			4		

	X=42							
Q27.	<p>The given figure shows a parallelogram. Find the value of x,y and z:</p>  <p>X= 90 (V.O.A.) X+Y+30+=180 Y=60 Z=Y=60(A.I.A.)</p>	4						
Q28.	<p>The measures of the two adjacent angles of a parallelogram are in the ratio 3:2. Find the measure of each of the angles of a parallelogram. Let the adjacent angles be 3X and 2X resp. $3X+2X=180^\circ$ $X=36$ ANGLES ARE 108° AND 72°</p>	4						
Q29.	<p>Properties 1 marks Construction 3 marks</p>	4						
Q30.	<p>Reema has a total of Rs. 590 as currency notes in the denominations of Rs. 50, Rs. 20 and Rs. 10. The ratio of the number of Rs. 50 notes and Rs. 20 notes is 3:5. If she has a total of 25 notes, how many notes of each denominations she has?</p> <p>Let the no. of rs.50 notes be 3X Let the no. of rs.20notes be 5X Let the no. of rs.10 notes be (25-8X) A.T.Q. $150X+100X + (25-8X)*10=590$ $X=2$ Rs.10 = 9 notes Rs.50 = 6 notes Rs.20 = 10 notes</p>	4						
Q31.	<p>A group of 7 people had enough food for a month. A few more people joined them and the food lasted for only 21 days. How many people joined them? Suggest any one way in which we can help a person in need. VALUE = 1 MARK</p> <table border="1" data-bbox="300 1608 1359 1684"> <tr> <td>NO. OF DAYS</td> <td>30</td> <td>21</td> </tr> <tr> <td>NO. OF PEOPLE</td> <td>7</td> <td>X</td> </tr> </table> <p>IT IS INDIRECT VARIATION $30*7 = 21*X$ $X=10$ reason 1 marks</p>	NO. OF DAYS	30	21	NO. OF PEOPLE	7	X	4
NO. OF DAYS	30	21						
NO. OF PEOPLE	7	X						