



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

ANNUAL NATIONAL ASSESSMENT

GRADE 3

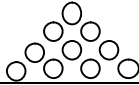

MATHEMATICS



SET 3: 2012 EXEMPLAR

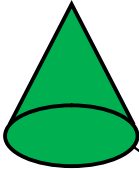

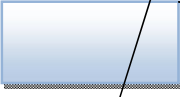
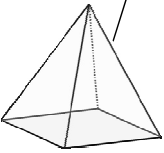
MEMORANDUM

Questions		Expected answers	Marks	Total Marks
1.	a.	550; 750; 850	1	3
	b.	499; 496; 495	1	
	c.	248; 256; 260	1	
2.	a.	100; 150; 200; 250; 350; 450; 500; 550; 600; 650; 700; 750	1	5
	b.	123; 132; 135; 138; 144; 147; 150; 153; 156; 159; 162	1	
	c.	496; 494; 492; 490; 486; 484; 482; 480; 476; 474; 470	1	
	d.	210; 215; 220; 230; 235; 240; 245; 255; 265; 270; 275	1	
	e.	313; 311; 308; 307; 306; 304; 303; 302; 301; 300	1	
3.		<div style="display: flex; justify-content: space-around;"> ✓ ✓ ✓ ✓ </div> +25, +25, 275, +25, 300, +25, 325, +25, 350, +25	1	4
			1	
			1	
			1	
4.		150	1	1
5.	a.	6	1	2
	b.	24	1	
6.	a.	Four hundred and seventy-three	1	2
	b.	Two hundred and four	1	
7.	a.	269	1	2
	b.	Two hundred and sixty-nine	1	
8.		Seven hundred and eighty	1	1
9.		<div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; margin-right: 20px;"> <p>Three hundred and sixty-one</p> <p>Two hundred and ten</p> <p>Three hundred and sixteen</p> <p>One hundred and sixty</p> <p>Four hundred and eighty-three</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>160</p> <p>483</p> <p>361</p> <p>316</p> <p>210</p> </div> </div>	1	5
			1	
			1	
			1	
			1	
10.		2 nd , 6 th , 13 th , 28 th , 31 st	1	1

11.		fourth	1	1																
12.	a.	<	1	3																
	b.	>	1																	
	c.	<	1																	
13.		B	1	1																
14.	a.	167; 276; 366; 376; 613; 631	1	2																
	b.	247; 422; 442; 472; 727; 742	1																	
15.	a.	670 OR 600 + 70	1	2																
	b.	7	1																	
16.	a.	70	1	2																
	b.	7	1																	
17.		True	1	1																
18.		B- hundreds	1	1																
19.		500 + 70 + 3 OR 570 + 3 OR 500 + 73 OR any other acceptable method	1	2																
			1																	
20.	a.	2 + 9 + 8	1	2																
	b.	Hundreds + ten + units	1																	
21.			1	4																
			1																	
			1																	
			1																	
22.		317	1	1																
23.		<table border="1"> <thead> <tr> <th></th> <th>Number doubled</th> <th>Number</th> <th>Number halved</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>300</td> <td>150</td> <td>75</td> </tr> <tr> <td>b</td> <td>168</td> <td>84</td> <td>42</td> </tr> <tr> <td>c</td> <td>42</td> <td>21</td> <td>10 + 1 half</td> </tr> </tbody> </table>		Number doubled	Number	Number halved	a	300	150	75	b	168	84	42	c	42	21	10 + 1 half	1	6
		Number doubled	Number	Number halved																
	a	300	150	75																
	b	168	84	42																
c	42	21	10 + 1 half																	
			1																	
			1																	
			1																	
24.			1	1																
25.	a.	60	1	2																
	b.	130	1																	

26.		Number of bottle-tops = $619\checkmark + 125 = 744\checkmark$ Accept any other correct method	2	2		
27.		Number of stamps = $23\checkmark \times 4 = 92\checkmark$ OR $23 + 23 + 23 + 23 = 92$ Accept any other correct method	2	2		
28.		Number of biscuits = $45 \div 4 = 11\checkmark$ and one quarter OR 11 and 1 remains \checkmark Accept any other correct method	2	2		
29.		Number of marbles = $68 \div 2\checkmark = 34\checkmark$ Accept any other correct method	2	2		
30.		Number of sweets = $35 \div 3\checkmark = 11$ rem $2\checkmark$ Accept any other correct method	2	2		
31.		Number of marbles = $125 - 82\checkmark = 43\checkmark$ Accept any other correct method	2	2		
32.		Number of cars = $21 \times 5\checkmark = 105\checkmark$ OR $21 + 21 + 21 + 21 + 21\checkmark = 105\checkmark$ Accept any other correct method	2	2		
33.	a.	R1;30	1	9		
	b.	Amount spend = $R3;50\checkmark + R3;50 + R2;20 + R3;00$ $R7;40 = R19;60\checkmark$	2			
	c.	Cost = $R15 + R15 + R3;50 + R3;50 + R4;40 = R41;40\checkmark$ Change = $R50\checkmark - R41;40\checkmark = R8;60\checkmark$	4			
	d.	$\checkmark \quad \checkmark$ $R60 \div R15 = 4$ or $R60 - R15 - R15 - R15 - R15 = 0$	2			
34.	a.	R7;63	1	6		
	b.	R2;07	1			
	c.	R5;79	1			
	d.	263 c	1			
	e.	615 c	1			
	f.	425 c	1			
1.	a.	Patterns; Functions and Algebra 	1	4		
	b.		1			
	c.	<table border="1" data-bbox="448 1854 852 1919"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>				

	d.		1															
2.		 <p>Accept any other creative pattern</p>	1	1														
3.	a.	529; 530; 531	1	4														
		Counting on in 1s	1															
	b.	732; 730; 728	1	3														
		Counting backwards in 2s	1															
4.		<table border="1" data-bbox="391 1064 1141 1153"> <tr> <td>Number of crates</td> <td></td> <td></td> <td></td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>Number of cans</td> <td></td> <td></td> <td>75</td> <td></td> <td></td> <td>150</td> </tr> </table>	Number of crates					5		Number of cans			75			150	1	1
Number of crates					5													
Number of cans			75			150												
			1															
5.	a.	340; 350; 360	1	4														
		Counting on in 10s – Accept any other correct pattern	1															
	b.	503; 502; 501	1	1														
		Counting backwards in 1s – Accept any other correct pattern	1															
		Space and Shape																
1.		C	1	1														
2.		B and C	2	2														
3.	a.	A triangular pyramid	1	2														
	b.	4	1															

4.			Square-based pyramid	1	4
			Cone		
			Rectangular prism		
			Cylinder		
		Measurement			
1.	a.	Centimetres; cm	1	2	
	b.	Metre; m	1		
2.	a.	April; June; September; November	2	7	
	b.	365	1		
	c.	4	1		
	d.	52	1		
	e.	12	1		
	f.	45 (1 May – 16 June)	1		

3.	a.	Sunday	1	4
	b.	Wednesday	1	
	c.	Tuesday	1	
	d.	Saturday	1	

4.		6	1	1																																
5.		One-third OR 1 third	1	1																																
6.		Ten to; 50 minutes	1	1																																
7.		<table border="1"> <thead> <tr> <th></th> <th>Sides</th> <th>Estimation</th> <th>Actual Measurement</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>AB</td> <td>+ - 6cm</td> <td>6 cm</td> </tr> <tr> <td>b.</td> <td>BC</td> <td>+ - 3cm</td> <td>3 cm</td> </tr> <tr> <td>c.</td> <td>DC</td> <td>+ - 6cm</td> <td>6 cm</td> </tr> <tr> <td>d.</td> <td>AD</td> <td>+ - 3cm</td> <td>3 cm</td> </tr> <tr> <td>e.</td> <td>PQ</td> <td>+ - 3cm</td> <td>3 cm</td> </tr> <tr> <td>f.</td> <td>PR</td> <td>+ - 5cm</td> <td>5 cm</td> </tr> <tr> <td>g.</td> <td>QR</td> <td>+ - 4cm</td> <td>4 cm</td> </tr> </tbody> </table> <p>Accept any estimation more or less close to the actual length</p>		Sides	Estimation	Actual Measurement	a.	AB	+ - 6cm	6 cm	b.	BC	+ - 3cm	3 cm	c.	DC	+ - 6cm	6 cm	d.	AD	+ - 3cm	3 cm	e.	PQ	+ - 3cm	3 cm	f.	PR	+ - 5cm	5 cm	g.	QR	+ - 4cm	4 cm	1 1 1 1 1 1 1	7
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e.	PQ	+ - 3cm	3 cm																																	
f.	PR	+ - 5cm	5 cm																																	
g.	QR	+ - 4cm	4 cm																																	
8.	a.	18 cm	1	2																																
	b.	12 cm	1																																	
1.		<p>Data Handling</p> <p>a. Number of learners = 8; 8; 5; 5; 6</p> <div style="text-align: center;"> <table border="1"> <caption>Shoe sizes of classmates</caption> <thead> <tr> <th>Shoe size</th> <th>Number of Classmates</th> </tr> </thead> <tbody> <tr> <td>size 3</td> <td>8</td> </tr> <tr> <td>size 4</td> <td>8</td> </tr> <tr> <td>size 5</td> <td>5</td> </tr> <tr> <td>size 6</td> <td>5</td> </tr> <tr> <td>size 7</td> <td>6</td> </tr> </tbody> </table> </div> <p>b.</p> <p>Accept any other correct bar graph</p>	Shoe size	Number of Classmates	size 3	8	size 4	8	size 5	5	size 6	5	size 7	6	5 5	10																				
Shoe size	Number of Classmates																																			
size 3	8																																			
size 4	8																																			
size 5	5																																			
size 6	5																																			
size 7	6																																			

2.	a.	25	1	6
	b.	5	1	
	c.	Netball	1	

	d.	Cricket	1	
	e.	Soccer; swimming	2	
3.	a.	20	1	4
	b.	Friday	1	
	c.	55	1	
	d.	15	1	