Maths Key Skills

Name: .... Date: ....

Stage 8: Skill Check 13 - Answers

Class/Group: ....

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. If 32 x 2.8 = 89.6 What is 89.6 ÷ 28?	8:1 **3.2**	11. Expand & simplify: **(y – 5)(y -2)**	8:16 **y²-7y+10**	21. The probability of a train being on time is 0.69. The probability of a train being early is 0.07. Work out the probability that a train is late?	8:26 **1-0.76** **=0.24**
2. Write 60 as the product of its prime factors. Circle one of these 2x5x6 2x3x10 2²x3x5	8:2 ✗	12. The number of boys in a class is 3 times the number of girls. Write this as a ratio.	8:17 **B:G** **3:1**	22. 56 people attended a school club for tennis or athletics; 36 were males. 16 females chose tennis. Find the probability that one person chosen was a female who chose athletics?	8:27 $\frac{4}{56}=\frac{1}{14}$
3. Estimate by rounding to 1sf an answer to: 68 x 401 198	8:3 **140**	13. For orange, you mix 13 parts yellow to 7 parts red. How much of each colour is needed to make 10 litres of orange?	8:18 **Y-6.5litres** **R-3.5litres**		
4. If 4³ = 64, what is 4⁴	8:4 **64x4** **=256**	14. A school had 840 pupils last year. This year there has been a 5% increase. What is the current number?	8:19 **882**		
5. Factorise: 14 + 7y	8:6 **7(2 + y)**	15. Convert 20m/sec to km/h?	8:20 $\frac{20\times60\times60}{1000}$ **=72km/h**	23. A spinner has equally like numbers 1,2, 3 & 4 on. The spinner is spun twice. What is the probability of scoring two numbers the same?	8:28 $\frac{4}{16}=\frac{1}{4}$
6. Simplify: a² + a² + a² + a²	8:7 **4a²**	16. How many triangles in an octagon?	8:21 **6**		
7. Make 'n' the subject of the formula M = 3n + p	8:8 **n=M – p** **3**	17. Give the circumference of a circle with **radius** 20m in terms of π.	8:21 **40π m**	24. Estimate the mean score 🖩	8:29
8. Solve: 7p + 2 = 5p - 4	8:10 **2p = -6** **p = -3**	18. Work out the volume of this prism. 7cm 8cm 6cm	8:22 **½ (6x7)** **=21cm²** **21x8** **=168cm³**	<table><tr><th>Score</th><th>Frequency</th><th>fx</th></tr><tr><td>1-5</td><td>2</td><td>2x3=6</td></tr><tr><td>6-10</td><td>9</td><td>9x8=72</td></tr><tr><td>11-15</td><td>5</td><td>5x13=65</td></tr><tr><td>16-20</td><td>3</td><td>3x18=54</td></tr><tr><td>21-25</td><td>1</td><td>1x23=23</td></tr></table>	**220÷20** **=11**
9. Write down the gradient of the graph with the equation: y = 3 – 4x	8:12 **-4**	19. Enlarge rectangle by sf ½ centre X	8:23 ✗	25. Draw in the line of best fit Scatter graph of test results & days absent	8:30 ✗
10. Give the first 3 terms of the sequence with nth term = 3n - 2	8:15 **1, 4, 7**	20. A map has a scale of **1 : 50000** What real life distance is represented by 4cm? Give you answer in km.	8:25 **2km**		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	