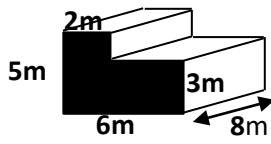
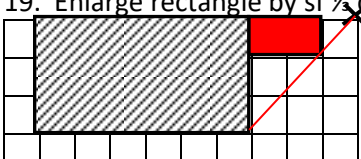
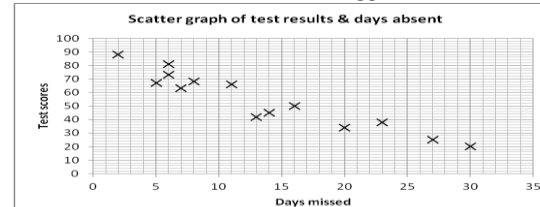
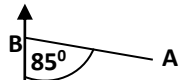


Maths Key Skills

Stage 8: Skill Check 12 - Answers

Name: Date:

Class/Group:

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability											
1. If $32 \times 2.8 = 89.6$ What is $896 \div 32$?	8:1 28	11. Expand & simplify: $(2x + 1)(3x - 7)$	8:16 $6x^2 - 11x - 7$	21. Carol went to the library to choose a book about cookery or sewing or knitting $P(\text{a sewing book}) = 0.09$ $P(\text{knitting}) = 0.27$ Work out the probability of choosing a cookery book	8:26 1-0.36 =0.64										
2. Write 45 as the product of its prime factors.	8:2 $3^2 \times 5$	12. The ratio of red : blue tiles is 5:4. 4/9 of the tiles are blue. Circle TRUE or FALSE	8:17	22. Of 84 cats & dogs in a sanctuary, 50 are dogs. 18 of the cats are female. What is the probability of choosing a male cat?	8:27 16/84										
3. Estimate by rounding to 1sf an answer to: $43.9 \div 0.18$	8:3 $40 \div 0.2$ $=400 \div 2$ =200	13. In a pet shop the ratio of rabbits to guinea pigs is 3 : 2. There were 10 guinea pigs. How many rabbits?	8:18 15	23. A spinner has equally like numbers 1,2 & 3 on. The spinner is spun twice. What is the probability of scoring two numbers the same?	8:28 $\frac{3}{9}$ OR $\frac{1}{3}$										
4. Evaluate: 3^5	8:4 243	14. Some running shoes priced £62 have a 5% discount. Complete the multiplier to give the selling price?	8:19 62×0.95	24. Give the modal class interval score	8:29 16-20										
5. Factorise: $4ab - 10b$	8:6 $2b(2a-5)$	15. Convert 50m/sec to km/h?	8:20 180km/h	<table border="1"> <thead> <tr> <th>Score</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1-5</td> <td>1</td> </tr> <tr> <td>6-10</td> <td>6</td> </tr> <tr> <td>11-15</td> <td>7</td> </tr> <tr> <td>16-20</td> <td>11</td> </tr> </tbody> </table>		Score	Frequency	1-5	1	6-10	6	11-15	7	16-20	11
Score	Frequency														
1-5	1														
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16-20	11														
6. Simplify: $4a^3 \div 2a^2$	8:7 2a	16. What is the sum of the interior angles of a heptagon?	8:21 5×180 $=900^\circ$												
7. Make 'p' the subject of the formula $M = 3n + p$	8:8 $p=M-3n$	17. Work out the area of a circle with diameter 26cm in terms of π .	8:21 $169\pi \text{ cm}^2$												
8. Solve $x - 5 = 3(x - 4)$	8:10 $x-5=3x-12$ $-5=2x-12$ $2x=7$ $x=3.5$	18. Work out the volume of this prism. 	8:22 $6 \times 3 + 2 \times 2$ $=22\text{m}^2$ 22×8 $=176\text{m}^3$												
9. Write down the equation of a straight line graph with a gradient of -1 and cuts the y-axis at +2	8:12 $y=-x+2$ or $y=2-x$	19. Enlarge rectangle by sf $\frac{1}{2}$ centre X 	8:23	25. . What correlation does this data suggest? 											
10. Give the first 3 terms of the sequence with the nth term = $2n + 1$	8:15 3, 5, 7	20. Describe the bearing of A from B 	8:25 095°												
Total (A)		Total (B)		Total (C)											
Test Total (A+B+C)		R (0-9)		Y (10-19)	G (20-25)										