

Maths Key Skills

Stage 9: Skill Check 4 - Answers

Name:

Date:

Class/Group:

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write 1.8×10^2 as an ordinary number	9:1 180	11. Work out the balance on £400 over 3 years at 3% compound interest	9:13 £437.09	21. Group B take Biology and group C take Chemistry. Shade the Venn diagram for those who take neither. 	9:27
2. Write 3×10^{-3} as an ordinary number	9:1 0.003	12. Jenny used 368g of flour which was 15% more than suggested. Find original	9:14 320g		
3. 4.7cm has been rounded to 1dp. Express the limits in the form $a < x \leq b$	9:2 $4.65 \leq x < 4.75$	13. Mass = 5.6g. Density = 1.4g/cm^3 What is the Volume?	9:15 4cm^3		
4. Solve: $x^2 - 3x - 18 = 0$	9:4 $x = 6 \text{ or } -3$	14. Is distance (D) in direct proportion to time (T) in this graph?	9:16 YES	22. The probability of passing Maths is 0.4, & English is 0.2. Complete the tree diagram. 	9:28
5. If $2x+3 < 11$, show the solution for x on the number line 	9:5	15. The two shapes are similar. Find x 	9:17 Sf = $15 \div 12 = 1.25$ $x = 25 \div 1.25 = 20 \text{cm}$		
6. Make 'p' the subject of the equation $a(p - q) = r$	9:6 $p = \frac{r + aq}{a}$	16. In multiples of π , work out the area of a semicircle of radius 6cm	9:18 $18\pi \text{ cm}^2$	23. Use the tree diagram to work out the probability of passing both of the subjects	9:28 0.08
7. Solve the equation: $\frac{x-2}{5} = 1$	9:7 $x = 7$	17. Work out the curved surface area of this cylinder in terms of π	9:20 80π	24. Construct the perpendicular line to the line from the point 	9:29
8. Write down the equation of a line parallel to $y = 3 - x$	9:8 $y = \pm c - x$	18. Give the condition of congruency: 	9:21 None		
9. Write the equation of the line. 	9:9 $S = 300 + 100m$	19. To find 'x' choose one calculation: Circle choice $\sqrt{8^2 + 3^2}$ OR $\sqrt{8^2 - 3^2}$	9:22	25. Give an example of how you would take a <u>random sample</u> of people using the local leisure centre. Example: Survey every 10 th person going in or coming out	9:29
10. Evaluate $t^2 - 4t$ and $t = -3$	9:12 $9 + 12 = 21$	20. If $\tan x = \frac{4}{3}$, find x to 3sf	9:23 53.1°		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)		Y (10-19)	G (20-25)