

Maths Key Skills

Name:

Date:

Stage 9: Skill Check 15 - Answers

Class/Group:

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write 4.7×10^5 as an ordinary number	9:1 470000	11. Work out the balance on £500 over 3 years at 6% simple interest	9:13 £590	21. 28 people in a room were asked about newspapers: 3 bought am & pm paper 15 bought am paper 8 bought pm paper Complete the Venn diagram	9:27 28
2. Write 5.23×10^{-1} as an ordinary number	9:1 0.523	12. A house has increased by 30% to £106600. What was it worth before?	9:14 £82000		
3. 470 has been rounded to 2sf Express the limits in the form $a \leq x < b$	9:2 $465 \leq x < 475$	13. Volume = $3m^3$ Density = $190kg/m^3$ What is the Mass?	9:15 570kg	22. A dice is rolled and then a coin is tossed. Complete:	9:28
4. Factorise: $x^2 + 3x - 10$	9:4 $(x+5)(x-2)$	14. Is the graph in Q9 showing direct or inverse proportion?	9:16 Direct		
5. If $5x > 4x + 5$, show the solution for x on the number line	9:5 	15. The two shapes are similar. Find x	9:17 Sf = $12 \div 5 = 2.4$ $X = 3.5 \times 2.4 = 8.4cm$		
6. Make 'w' the subject of the equation $P = \frac{3w+20}{100}$	9:6 $w = \frac{100P-20}{3}$	16. Work out the AREA of a quarter-circle with a radius of 8cm (2sf)	9:18 $\frac{1}{4} \pi 8^2 \div 4 = 50cm^2$	23. From the Tree diagram work out the probability of getting a SIX and a TAIL	9:28 $\frac{1}{12}$
7. Solve the equation: $\frac{2y-3}{6} + \frac{y+2}{3} = \frac{5}{2}$	9:7 $4y=14$ $y = 3.5$	17. Work out the curved surface area of a cylinder with $r=7m$ & $h=12m$ (3sf)	9:20 $2\pi r \times h = 2 \times \pi \times 7 \times 12 = 528m^2$	24. Construct the perpendicular line to the point on the line.	9:26
8. Is $x + y = 6$ parallel to $2x + 2y = 10$?	9:8 YES	18. If these are congruence, state the reason	9:21 ASA		
9. Give the gradient & its meaning	9:9 £9 per cartridge	19. Work out length 'x' (to 1dp)	9:22 $\sqrt{5^2 + 2.4^2} = 5.5m$	25. The teacher wants to conduct a survey with 50 students about school meals. She gives every student in the school a number and uses the computer to generate numbers to identify the sample for the survey. This is a good method; explain why.	9:29
10. Evaluate $b^3 + b$ when $b = -3$	9:12 $-27 - 3 = -30$	20. If $\tan 27^\circ = \frac{x}{7}$, work out x (2sf)	9:23 3.6	It is a good method to identify the sample for the survey because it is random and everyone has an equal chance	
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	