


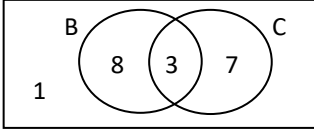
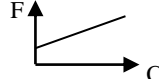
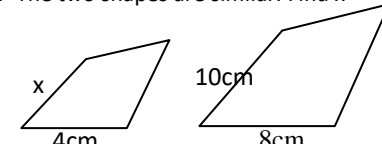
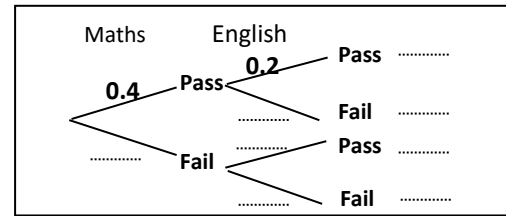
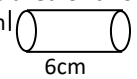
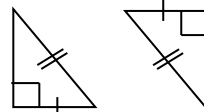
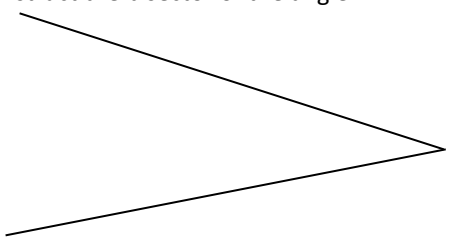
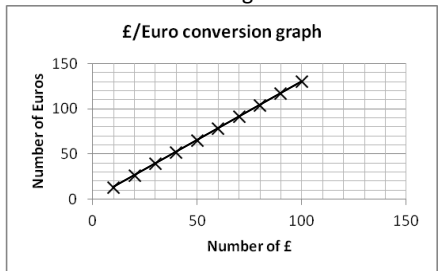
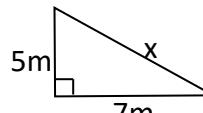

# Maths Key Skills

Name: .....

Date: .....

# Stage 9: Skill Check 5

Class/Group: .....

| A: Number & Algebra  |                   | B: Proportion, Geometry & Measure  |      | C: Geometry & Measure, Statistics & Probability  |      |
|--|-------------------|--|------|--|------|
| 1. Write <b>93 000 000</b> in standard form  | 9:1               | 11. Work out the <b>balance</b> on £1000 over 3 years at 8% simple interest  | 9:13 | 21. Work out the p(B)  | 9:27 |
| 2. Write <b>0.0072</b> in standard form  | 9:1               | 12. A coat cost £84 with 20% off. Find original cost.   | 9:14 |   |      |
| 3. 60 has been rounded to nearest 10. Express the limits in the form $a < x \leq b$                            | 9:2<br>$< x \leq$ | 13. Mass = 45g. Volume = 5cm <sup>3</sup> . What is the density?   | 9:15 |  |      |
| 4. Factorise: $x^2 + 6x + 8$   | 9:4               | 14. Is this Celsius to Fahrenheit conversion graph in direct proportion?                            | 9:16 | 22. The probability of passing Maths is 0.4, & English is 0.2. Complete the tree diagram.  | 9:28 |
| 5. If $0 < x \leq 6$ , show the solution for x on the number line  | 9:5               | 15. The two shapes are similar. Find x.    | 9:17 |   |      |
| 6. Make 's' the subject of the equation $V^2 = u^2 + 2as$  | 9:6               | 16. In multiples of $\pi$ , work out the perimeter of a quarter-circle of diameter 8cm   | 9:18 |  |      |
| 7. Solve the equation: $\frac{2x+1}{3} = 7$  | 9:7               | 17. Work out the curved surface area of this cylinder in terms of $\pi$ . $r=3\text{cm}$            | 9:20 | 23. Use the tree diagram to work out the probability of failing both of the subjects   | 9:28 |
| 8. Write down the equation of a line parallel to $x + y = 5$   | 9:8               | 18. Give the condition of congruency:   | 9:21 | 24. Construct the bisector of the angle.   | 9:25 |
| 9. Give the rate of change  | 9:9               | 19. <br>To find 'x' choose one calculation: Circle choice $\sqrt{7^2 + 5^2}$ OR $\sqrt{7^2 - 5^2}$ | 9:22 | 25. A shop checked how many boxed games were sold in December and used this as a basis for the projected sales for the year.<br><br>Do you think that this is a good approach? Give a reason for your decision.<br><br><b>YES or NO - circle your response.</b><br><b>Reason</b><br>.....<br>..... | 9:29 |
| 10. Evaluate $V=5p^3$ when $p = 2$   | 9:12              | 20. If $\sin 38 = \frac{5}{x}$ find x (to 1dp)    | 9:23 |  |      |
| Total (A)  |                   | Total (B)  |      | Total (C)  |      |
| Test Total (A+B+C)   |                   | R (0-9)  |      | Y (10-19)  |      |
|  |                   |  |      | G (20-25)  |      |