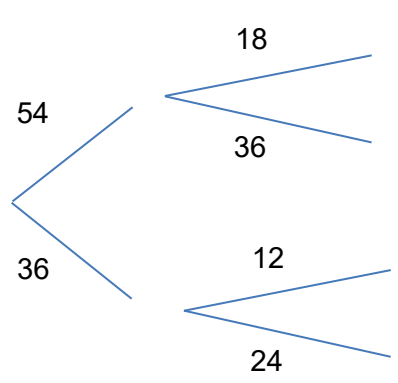


# Topic Test 4 Mark Scheme

## Probability - Foundation

| Q    | Answer   | Mark | Comments   |
|------|--|------|--|
| 1(a) |  | B3   | <p>B1 for 54 for boys and 36 for girls.</p> <p>B1 for one-third of their 54 and two thirds of their 54<br/>or for one-third of their 36 and two thirds of their 36</p> |
| 1(b) | $\frac{24}{90}$  | B1   |  |
|      | $\frac{4}{15}$   | B1ft | ft their fraction in simplest form   |
| 2(a) | 45 + 30 + 20 + 25 or 120   | M1   | oe   |
|      | $\frac{45}{120}$   | A1   |  |
| 2(b) | $\frac{49}{119}$   | B1   |  |

| Q           | Answer   | Mark | Comments     |
|-------------|--|------|--------------|
| <b>3(a)</b> | 0.55 for pink  | B1   | oe           |
|             | 45 ÷ 3 or 15<br>or 45 ÷ 3 × 2 or 30  | M1   |              |
|             | 0.3 for yellow<br>and 0.15 for blue  | A1   | oe           |
| <b>3(b)</b> | Three branches in first set  | M1   |              |
|             | Three branches labelled with<br>probabilities yellow 0.30, pink 0.55<br>and blue 0.15  | A1ft | ft their (a) |
|             | Two branches from yellow labelled 0.6<br>and 0.4<br>or two branches from pink labelled 0.3<br>and 0.7<br>or two branches from blue labelled<br>0.75 and 0.25           | B1   |              |
|             | Two of<br>Two branches from yellow labelled 0.6<br>and 0.4<br>or two branches from pink labelled 0.3<br>and 0.7<br>or two branches from blue labelled<br>0.75 and 0.25 | B1   |              |