## Topic Test 1 Mark Scheme

Congruence and similarity - Foundation

| Q Answer | Mark | Comments |
| :---: | :---: | :---: | :---: |


| $\mathbf{1}(\mathrm{a})$ | $(10 \times 1.5=) 15$ | B 1 |  |
| :---: | :--- | :---: | :--- |
|  | $(18 \times 1.5=) 27$ | B 1 |  |
|  | $7.5 \div 10$ or 0.75 | M 1 |  |
|  | 13.5 | A 1 |  |


| 2 | $5.6 \div 4.2=(1.333 .)$. | M1 | oe |
| :---: | :--- | :---: | :--- |
|  | $1.333 \ldots \times 2.4=3.2(\mathrm{~cm})$ | A1 |  |
|  | $4.8 \div 1.333 \ldots=3.6(\mathrm{~cm})$ | A1 |  |


| 3(a) | $\angle \mathrm{BAX}=\angle \mathrm{DCX}$ or $\angle \mathrm{ABX}=\angle \mathrm{CDX}$ <br> Alternate angles | B 1 |  |
| :---: | :--- | :---: | :--- |
|  | $\angle \mathrm{AXB}=\angle \mathrm{DXC}$ <br> Vertically opposite angles | B 1 |  |
|  | Triangles ABX and DCX are similar <br> as their corresponding angles are <br> equal | B 1 |  |
| 3(b) | $10 \div 4=(2.5)$ | M 1 |  |
|  | $2.5 \times 5=12.5(\mathrm{~cm})$ | A 1 |  |


| 4 | $180^{\circ}-65^{\circ}-48^{\circ}=67^{\circ}$ | B1 |  |
| :---: | :--- | :---: | :--- |
|  | Both triangles have the same three <br> angles so congruent or similar. | B1 | oe |
|  | 4.2 cms is opposite $48^{\circ}$ in one and <br> $65^{\circ}$ in the other so not congruent, <br> hence similar | B1 |  |

