## Topic Test 1 Mark Scheme

## Congruence and similarity - Higher

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


| $\mathbf{1}$ | AAA | B1 |  |
| :---: | :--- | :---: | :--- |
| $\mathbf{2}$ | $\frac{x}{6}=\frac{10}{18}$ | M1 | oe |
|  | $3 \frac{1}{3}$ | A1 |  |
|  | 8 | B1 |  |
| $\mathbf{4}$ | Triangle angle $=180$ <br> Obtuse, both $>90$ |  |  |


| 5 | $24 \div 12$ or 2 | M1 |  |
| :--- | :--- | :---: | :--- |
|  | their $2^{3} \times 432$ | M1dep | oe |
|  | 3456 | A1 |  |


| 6 | $135 \div 60$ or 2.25 | M1 |  |
| :--- | :--- | :---: | :--- |
|  | $\sqrt{\text { their } 2.25} \times 6$ | M1dep |  |
|  | 9 | A1 |  |


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


| 7 | Alternative method 1 |  |  |
| :---: | :---: | :---: | :---: |
|  | $O A=O B$ (radii) | B1 |  |
|  | $O C$ is common | B1 | oe |
|  | $C O B=(180-2 \times 31)$ | M1 |  |
|  | 118 and SAS | A1 |  |
|  | Alternative method 2 |  |  |
|  | $O C$ is common | B1 | Oe |
|  | $O C A=(180-118) \div 2$ | M1 |  |
|  | $O C A=31$ | A1 |  |
|  | 118 and 31 and ASA | A1 |  |


| 8 | $13^{2}-5^{2}$ or 144 | M1 |  |
| :--- | :--- | :---: | :--- |
|  | $\frac{5}{12}=\frac{15}{P Q}$ | M1dep | may be on diagram next to $R C$ |
|  | 36 | A1 | may be on diagram next to $P Q$ |
|  | A1ft | ft their 36 |  |

