

**SUPERVISOR**

**STATION 1**

(a) 135   (b) 216   (c) 198

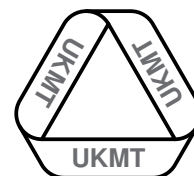
*Ensure that the worksheet and any scrap paper are cleared away before the next team arrives.*

**MARKS  
TO AWARD**

**6** correct solution  
**4** two parts correct  
**2** one part correct  
**0** otherwise

**RESOURCES**

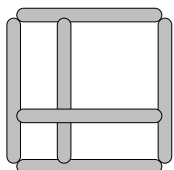
Question paper  
Worksheet  
Scrap paper



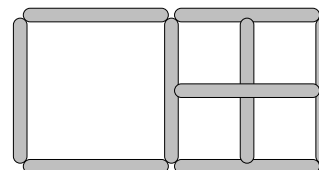
## SUPERVISOR

## STATION 2

(a) For example,



(b) For example,



Teams are required to set up the grid for part (a). The above are examples of solutions. In (a) you need to look for exactly three squares of different sizes. In (b) you need to look for exactly six squares. The edges of each square in both parts, for the answers to be acceptable, must be either a full stick or part of a stick. Please check each team's figures closely and judge the award of marks, or otherwise, by eye.

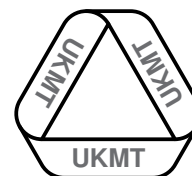
*Ensure any evidence of each team's solutions and any scrap paper are cleared away before the next team arrives.*

MARKS  
TO AWARD

**6** correct solution  
**3** one part correct  
**0** otherwise

## RESOURCES

Question paper  
17 sticks  
Scrap paper



**SUPERVISOR**

**STATION 3**

	1	2	3	4
A				
B				

A correct solution is attained by a cross in the B3 cell only.

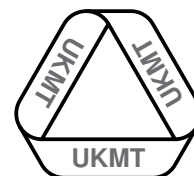
*Ensure that the worksheet and any scrap paper are cleared away before the next team arrives.*

MARKS  
TO AWARD

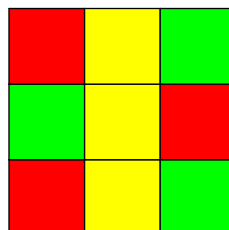
**6** correct solution  
**0** otherwise

**RESOURCES**

Question paper  
Worksheet  
Squared paper

**SUPERVISOR****STATION 4**

For example,



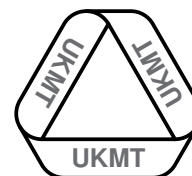
For the award of the marks please check carefully that each red card touches a yellow, each yellow card touches a green and each green card touches a red. The definition of "touches" here is that one square meets another edge to edge.

*Ensure any evidence of each team's solution and any scrap paper are cleared away before the next team arrives.*

<b>MARKS</b>	<b>6</b> correct solution
<b>TO AWARD</b>	<b>0</b> otherwise

**RESOURCES**

Laminated question paper  
Three red cards  
Three yellow cards  
Three green cards  
Scrap paper



**SUPERVISOR**

**STATION 5**

(a) 16   (b) 24   (c) 128

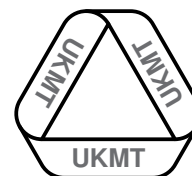
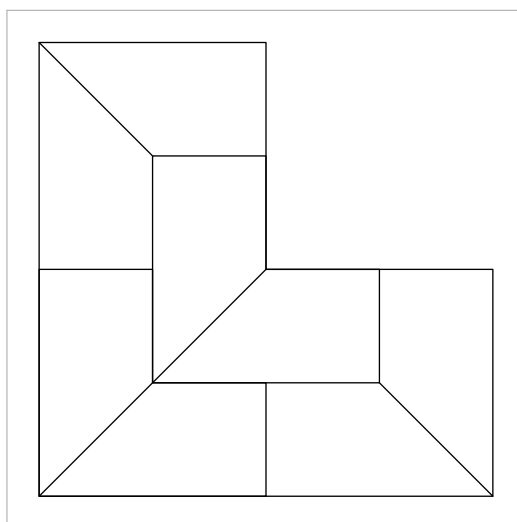
*Ensure that the worksheet and any scrap paper used are cleared away before the next team arrives.*

**MARKS  
TO AWARD**

**6** correct solution  
**4** two parts correct  
**2** one part correct  
**0** otherwise

**RESOURCES**

Question paper  
Worksheet  
Scrap paper

**SUPERVISOR****STATION 6**

Please check each team's L-shape for eight congruent quadrilaterals.  
Judge the award of marks, or otherwise, by eye.

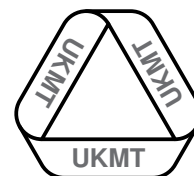
*Ensure that any evidence of each team's solution and any scrap paper are cleared away before the next team arrives.*

MARKS  
TO AWARD

**6** correct solution  
**0** otherwise

**RESOURCES**

Question paper  
L-shape  
Pencil  
Ruler  
Scrap paper



**SUPERVISOR**

**STATION 7**

(a)	<table border="1" style="margin: auto;"> <tr><td></td><td></td><td style="text-align: center;">11</td></tr> <tr><td></td><td style="text-align: center;">2</td><td style="text-align: center;">5</td></tr> <tr><td style="text-align: center;">13</td><td style="text-align: center;">3</td><td style="text-align: center;">7</td></tr> </table>			11		2	5	13	3	7	or	<table border="1" style="margin: auto;"> <tr><td></td><td></td><td style="text-align: center;">13</td></tr> <tr><td></td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">11</td><td style="text-align: center;">5</td><td style="text-align: center;">7</td></tr> </table>			13		2	3	11	5	7	(b)	<table border="1" style="margin: auto;"> <tr><td></td><td></td><td style="text-align: center;">5</td></tr> <tr><td></td><td style="text-align: center;">2</td><td style="text-align: center;">11</td></tr> <tr><td style="text-align: center;">13</td><td style="text-align: center;">3</td><td style="text-align: center;">7</td></tr> </table>			5		2	11	13	3	7	or	<table border="1" style="margin: auto;"> <tr><td></td><td></td><td style="text-align: center;">13</td></tr> <tr><td></td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">11</td><td style="text-align: center;">7</td></tr> </table>			13		2	3	5	11	7
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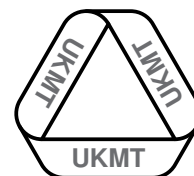
*Ensure any evidence of each team's solutions and any scrap paper are cleared away before the next team arrives.*

**MARKS  
TO AWARD**

- 6** correct solution
- 3** one part correct
- 0** otherwise

**RESOURCES**





















- Laminated question paper
- Six blue cards
- Six yellow cards



**SUPERVISOR**

**STATION 8**

For example,

Please check carefully that each row and each column of the grid contain an even number of counters. Also check that all 14 counters have been used.

*Ensure any evidence of each team's solution is removed before the next team arrives.*

MARKS TO AWARD	<p><b>6</b> correct solution <b>0</b> otherwise</p>
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<p><b>RESOURCES</b></p> <p>Question paper Laminated grid 14 counters</p>
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