

Station 1

A Triple Jump consists of a hop, step and jump.

The length of Keith's step was three-quarters of the length of his hop and the length of his jump was half the length of his step.

If the total length of Keith's triple jump was 17m, what was the length of his hop, in metres?



Station 1 Worksheet

The length of Keith's hop was:

_____ metres



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Station 1 Supervisor's Sheet

Resources:

Question paper

Worksheet

Marking:

6 marks for 'hop' = 8.

Notes:

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



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Station 2

A rectangle which measures 6 cm by 4 cm is divided into quarters by cutting it along both axes of symmetry. The resulting four rectangles are then separated and each is divided into quarters in exactly the same way. This process is then repeated until the perimeter of all the resulting small rectangles is 640cm. Find the number of small rectangles.



Station 2 Supervisor's Sheet

Resources:

Question paper

Scrap paper

Marking:

6 marks for correct solution of 1024 rectangles

Notes:

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



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Station 3

An isosceles triangle contains an angle which is three times as large as each of the other angles.

A scalene triangle has its shortest side attached to the longest side of the isosceles triangle thus forming a quadrilateral.

The angles of the scalene triangle are in the ratio 2:3:4.

What are the four angles of the quadrilateral?



Station 3 Worksheet

Angles are: _____



Station 3 Supervisor's Sheet

Resources:

Question paper

Worksheet

Answer: 40° , 96° , 108° , 116° in any order. (Degree sign not essential)

Marking:

All correct angles in any order – 6 marks

Notes:

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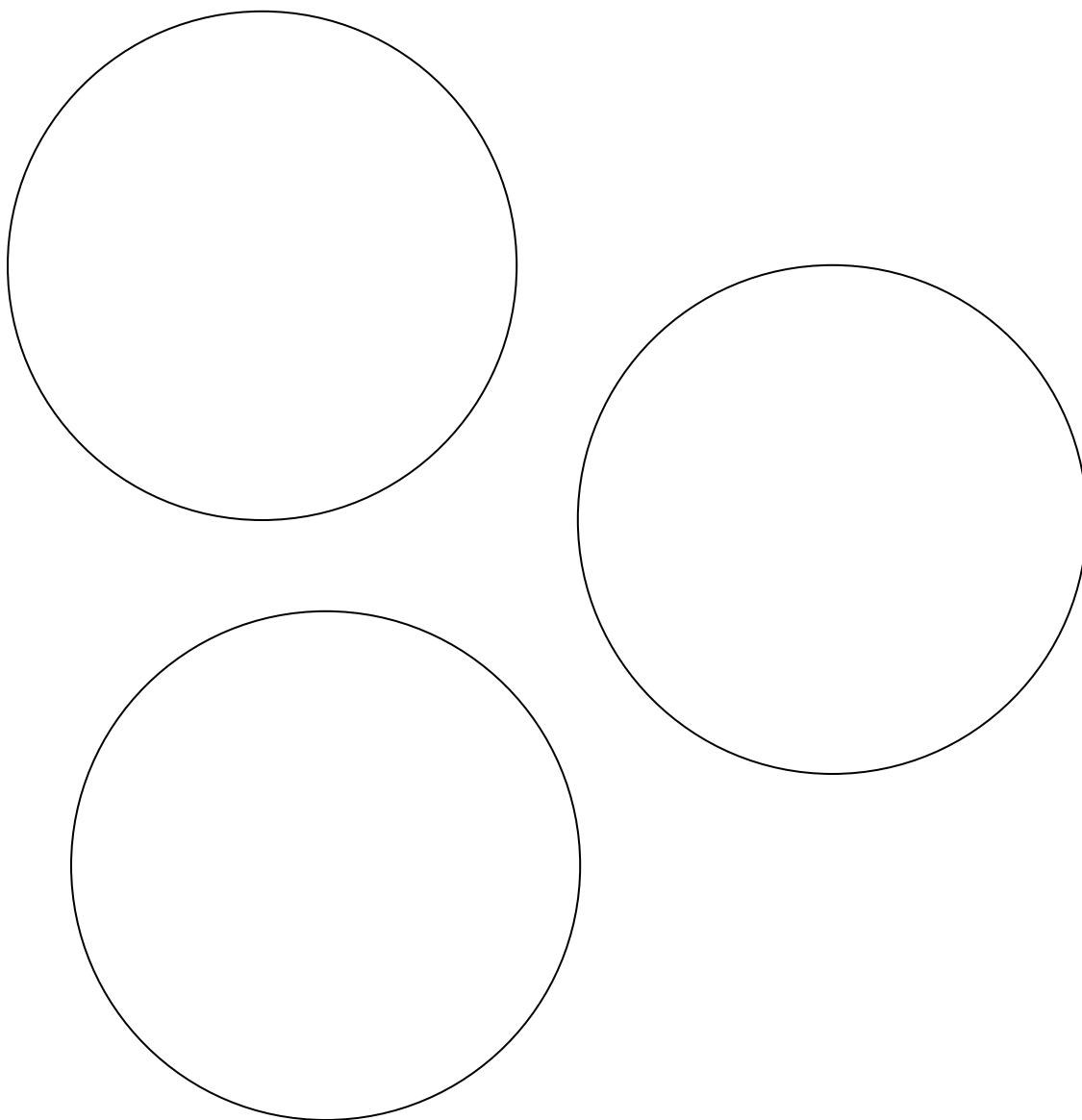
Station 4

Separate the number cards 1 to 12 into three sets, placing one set in each circle, so that the sum of the numbers in each set is the same.



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Station 4 Worksheet



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Station 4 Number Cards

1	2	3
4	5	<u>6</u>
7	8	<u>9</u>
10	11	12



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Station 4 - Supervisor's Sheet

Resources:

Question paper

Laminated A3 worksheet containing three large circles

12 laminated number cards with the numbers 1 to 12 on them

Scrap paper

Marking:

A correct solution showing a total of 26 in each circle on the worksheet – 6 marks

Notes:

Collect the number cards back together away from the worksheet and shuffle them. Remove any scrap paper before the next team arrives.



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Station 5

Place the number cards into a square 3x3 grid such that the numbers in every row and in every column are 3-digit squares.



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Station 5 Worksheet



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Station 5 Number Cards

1	1	<u>6</u>
<u>6</u>	<u>6</u>	<u>6</u>
7	<u>9</u>	<u>9</u>



Station 5 - Supervisor's Sheet

Resources:

Question paper

Laminated Grid (Worksheet)

Number cards: 1, 1, 6, 6, 6, 6, 7, 9 and 9.

1	6	9
6	7	6
9	6	1

9	6	1
6	7	6
1	6	9

Marking:

Either solution – 6 marks

Notes:

Ensure that number cards are cleared away before the next team comes.



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Station 6

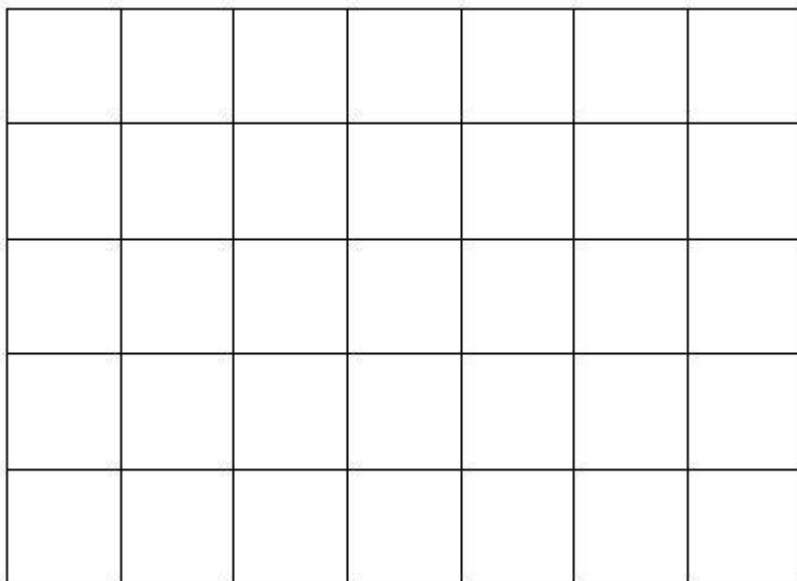
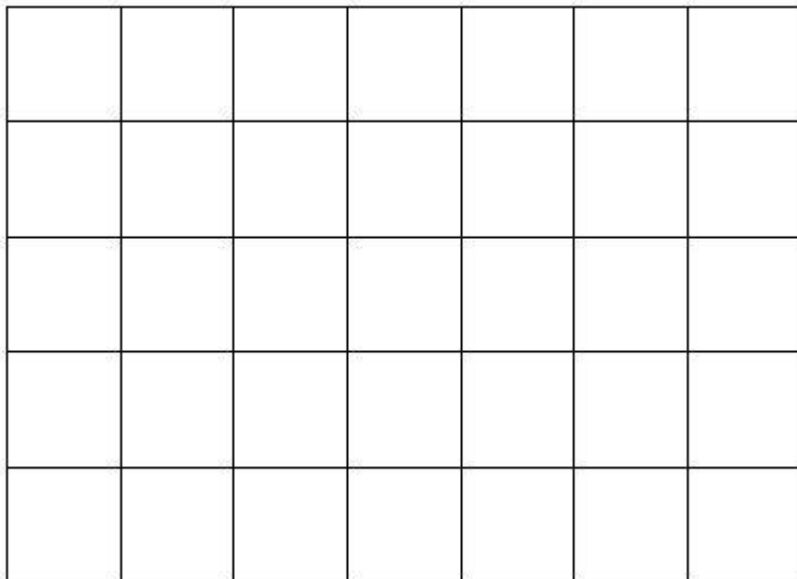
Find the number of squares formed by the lines of this 5 by 7 rectangular grid of squares.

No - the answer is not 35!



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Station 6 Worksheet



Station 6 - Supervisor's Sheet

Resources:

Question paper

Two paper worksheets containing 5 by 7 rectangular grids of squares

Scrap paper

Marking:

6 marks to be awarded for a correct solution of 85 squares.

Notes:

Ensure that any used worksheets and/or scrap paper are cleared away before the next team arrives.



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Station 7

The letters: A , C , E , G , I , L , N , O , P and T represent different one-digit numbers.

$$P + E + N = 11$$

$$P + E + N + C + I + L = 22$$

$$P + E + N + T + A + G + O + N = 40$$

What number is N ?



Station 7 Worksheet

$N =$ _____



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Station 7 - Supervisor's Sheet

Resources:

Question paper

Worksheet

Marking:

6 marks for $N = 6$

Notes:

Ensure any complete answer sheets and scrap paper are cleared away before the next team arrives.



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Station 8

A pair of dice is thrown and the score is obtained by finding the product of the two numbers on the top of the dice when they land.

In five throws of both dice:

The second score is 5 more than the first;

The third score is 6 less than the second;

The fourth score is 11 more than the third;

The fifth score is 8 less than the fourth;

What was the score for each of these five throws?



Station 8 Worksheet

1st throw: _____

2nd throw: _____

3rd throw: _____

4th throw: _____

5th throw: _____



Station 8 - Supervisor's Sheet

Resources:

Question paper

Worksheet

Scrap paper

A pair of dice

Marking:

The correct solution of 10, 15, 9, 20 and 12 in this order scores 6 marks

Notes:

Ensure any evidence of the correct solution and any scrap paper are cleared away before the next team arrives.



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