#MathsConf

Treasure Hunts

All the treasure hunts from our **MathsConfs** in one document.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

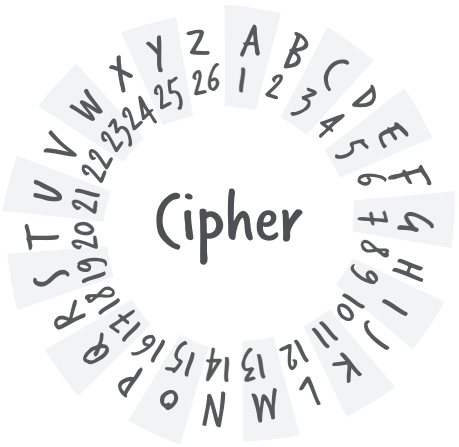
BLANK ANSWER SHEET

A	B	C	D	E	F	G	H	I	J	K	L	M

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf2 Autumn '14

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

A	B	C	D	E	F	G	H	I	J	K	L	M
C	O	L	L	A	B	O	R	A	T	I	O	N

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf2 Autumn '14

$$A = \sqrt{9}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

77cm

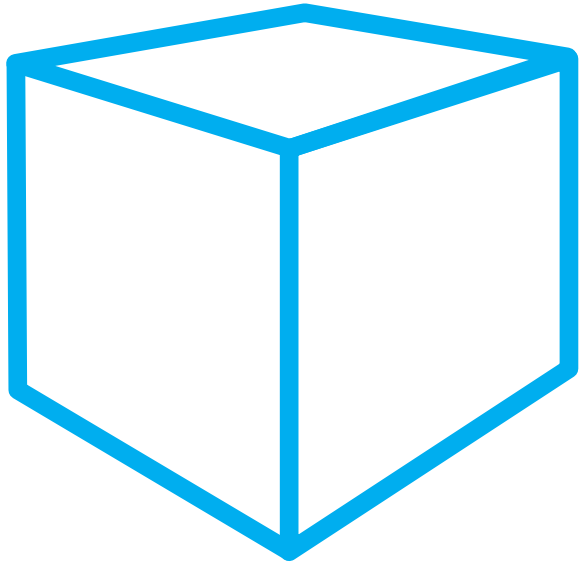
$1155cm^2$

Bcm

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$\frac{C^2}{6} + 30 = 54$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.



Volume of the cube is $1728m^3$.

D = length of side

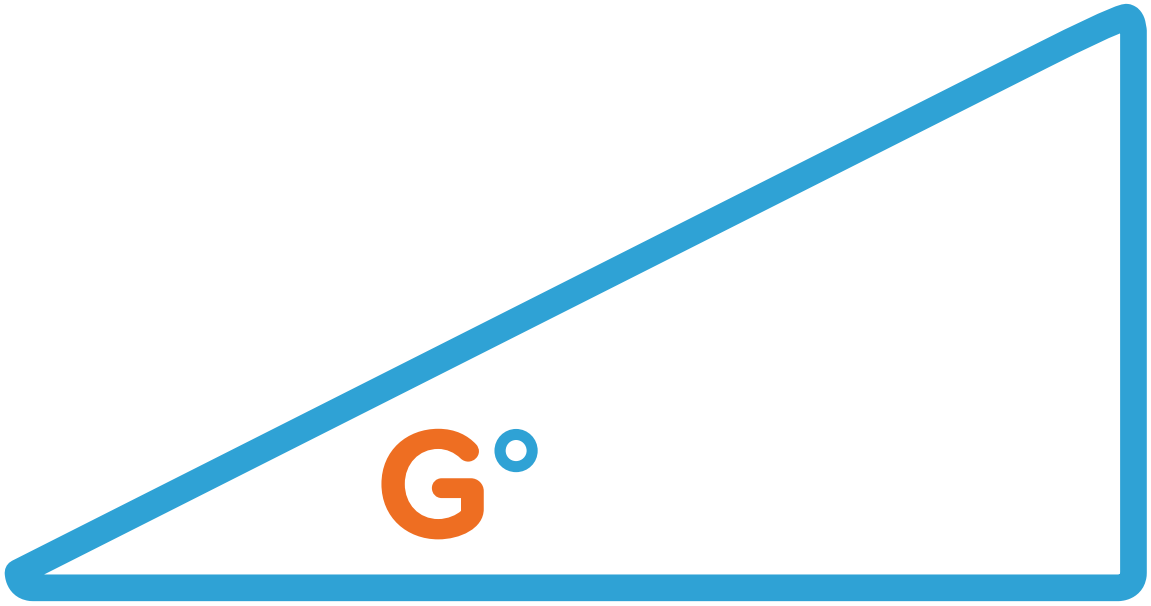
All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$E = (i^2)^2$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

F = the first prime number

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.



$$\frac{\sqrt{6}-\sqrt{2}}{4}$$

$$\frac{\sqrt{6}+\sqrt{2}}{4}$$

MathsConf2 Autumn '14

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

H is the angle formed at the centre by one number region on a dartboard.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

1 is the number of edges on a möbius strip.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

J is the number of sides on an icosagon.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$K = \sqrt{(10^{th} \text{ prime} \times 3 - 6)}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

L is the 5th triangular number (ignoring zero)

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

M = 700 ÷ total faces on the platonic solids

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK ANSWER SHEET

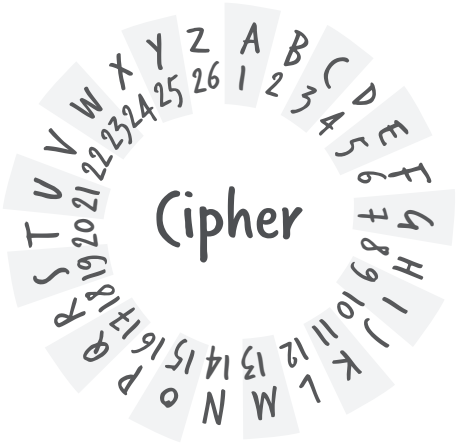
A	B	C	D	E	F	G	H	I	J	K	L

M	N	O	P	Q	R	S	T	U	V	W

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

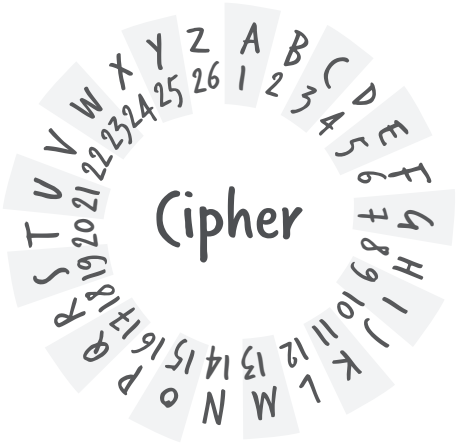
A	B	C	D	E	F	G	H	I	J	K	L
I	R	R	A	T	I	O	N	A	L	L	Y

M	N	O	P	Q	R	S	T	U	V	W
P	R	E	D	I	C	T	A	B	L	E

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf3 Spring '15

A

$$\sqrt{81}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

B

$$(11-7)^2 + \sqrt[3]{8}$$

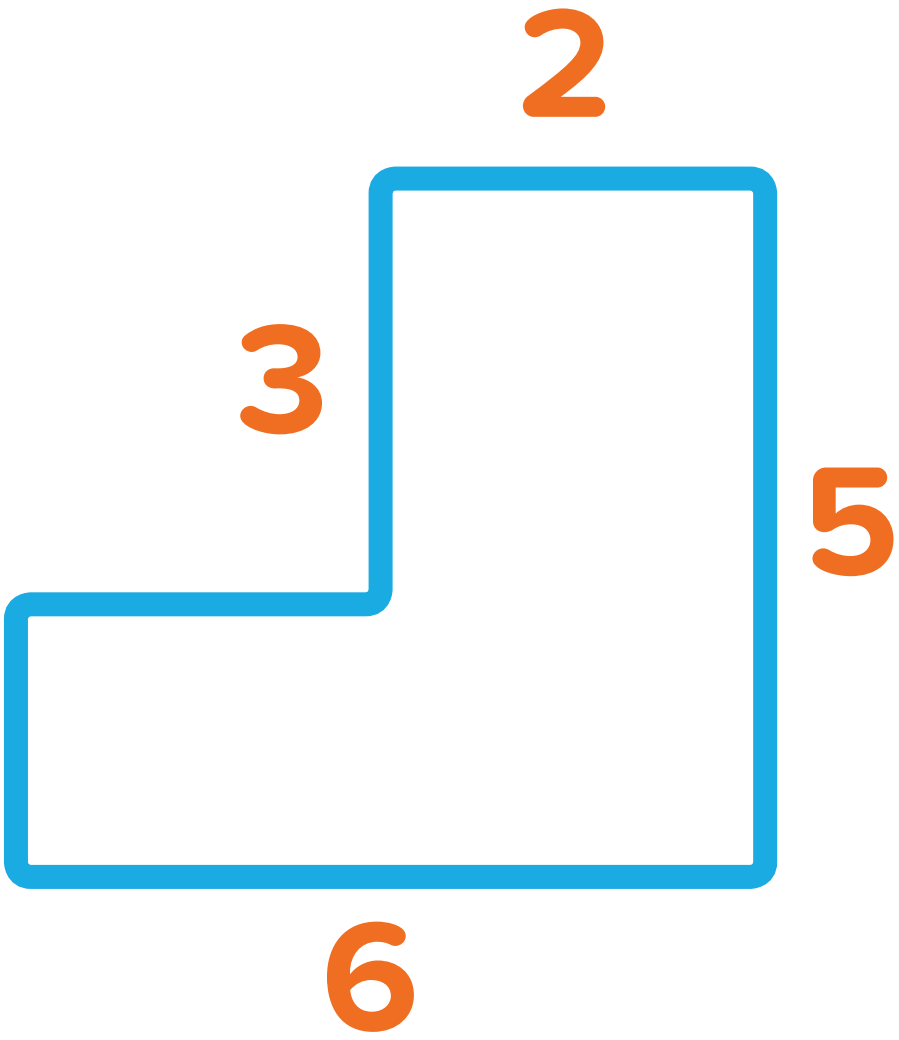
MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

C

What is the area of the shape?



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

D

a^0

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

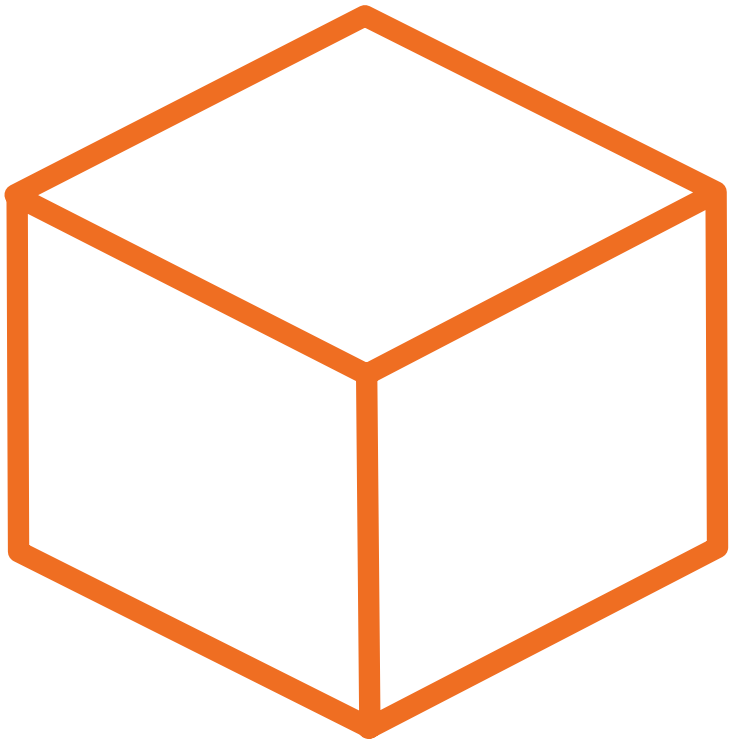
E

$$x^2 - x$$

When $x = 5$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

F



Cube Volume = 729

Side = ?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

G

$$6^2 - 3^3 - 12$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

H

Tetradecagon has how many sides?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

I

$$(15 \times 2) - (3 \times 8) - 5$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

J

The Number of Days of Christmas.

MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

K

Degress in 20mins

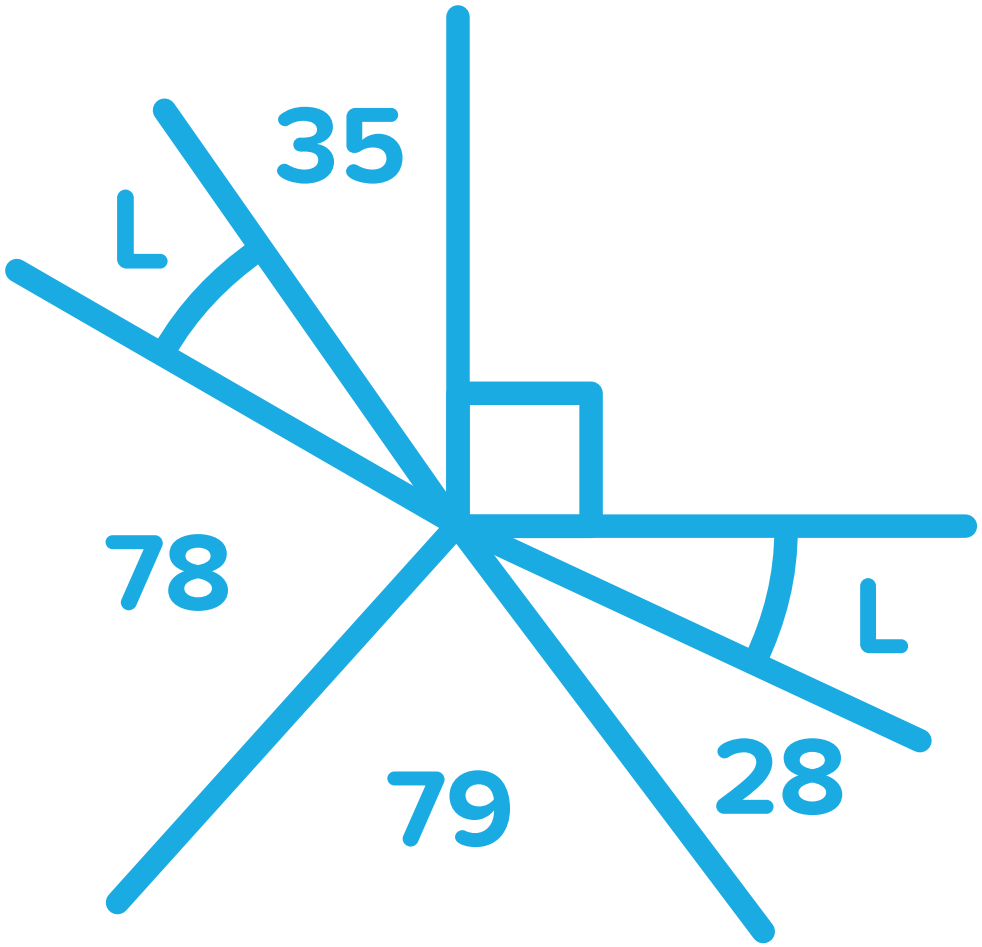
(Baker's Dozen - 3)

MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

L



Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

The number of ounces (oz) in a pound (lb)

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

XVIII

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

O

$\sqrt{14} - 3$

$\sqrt{14} + 3$

Area = ?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

P

The binary number 100 is what in base 10?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Q

degrees in a circle

sides in a tetracontagon

MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

R

Is the magic number

MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Sum of the first four triangular numbers

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

T

The probability that night follows day is...

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

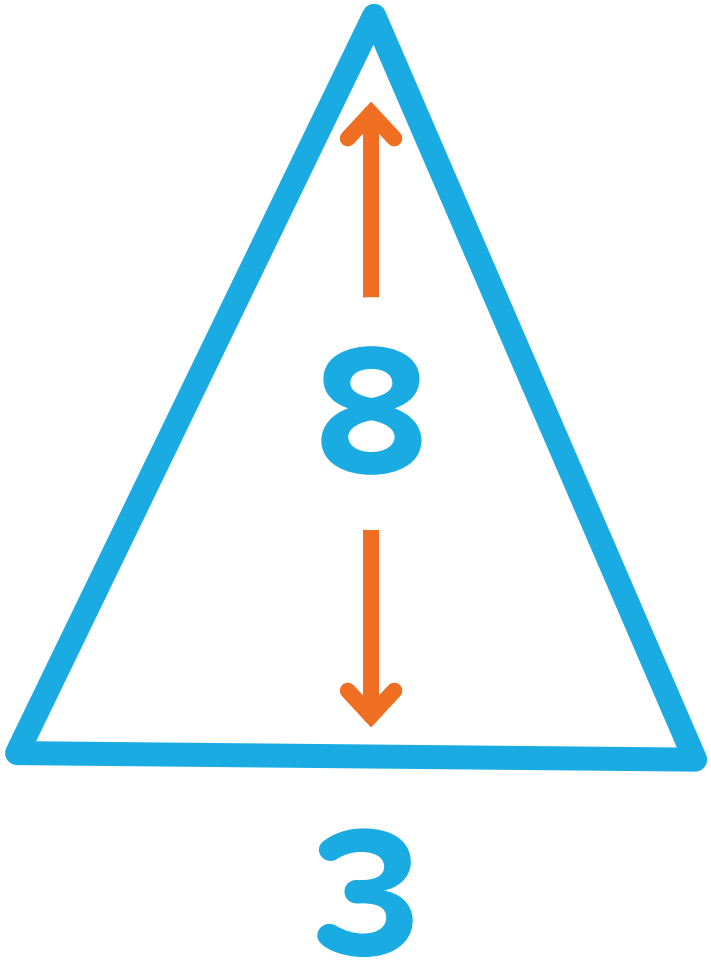
U

$$\sqrt[3]{8}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

V

What is the area of the shape?



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

W

√5th Square Number

MathsConf3 Spring '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK **ANSWER** SHEET

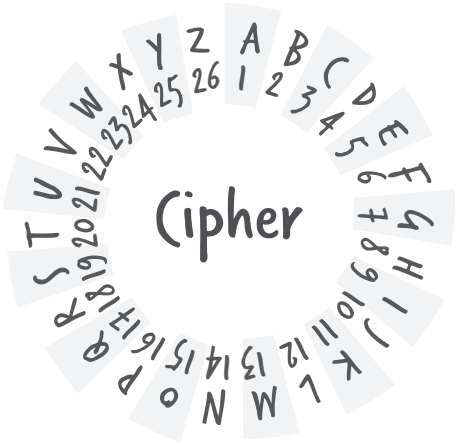
A	B	C	D	E	F	G	H

I	J	K	L	M	N	O	P	Q	R	S	T	U

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

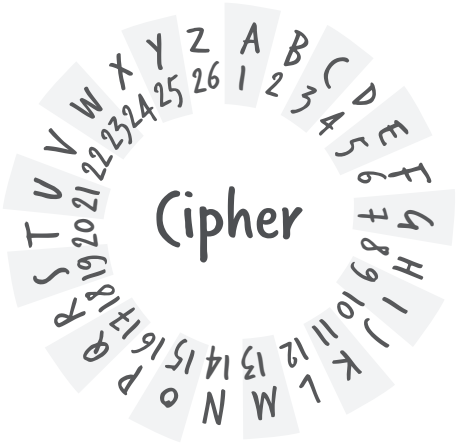
A	B	C	D	E	F	G	H
Q	U	O	D	E	R	A	T

I	J	K	L	M	N	O	P	Q	R	S	T	U
D	E	M	O	N	S	T	R	A	N	D	U	M

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf4 Summer '15

A

$$\sqrt{289}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

B

$$13 + 2^3$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

C

The fifth triangular number

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

D

$$\sqrt[3]{125} + e^{i\pi}$$

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

E

The number of Platonic Solids

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

F

Sum of angles around a point (in degrees)

Sum of first 4 triangular numbers

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$x^0$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

H

Number of faces on an icosahedron

MathsConf4 Summer '15

Mathematics. Solved.

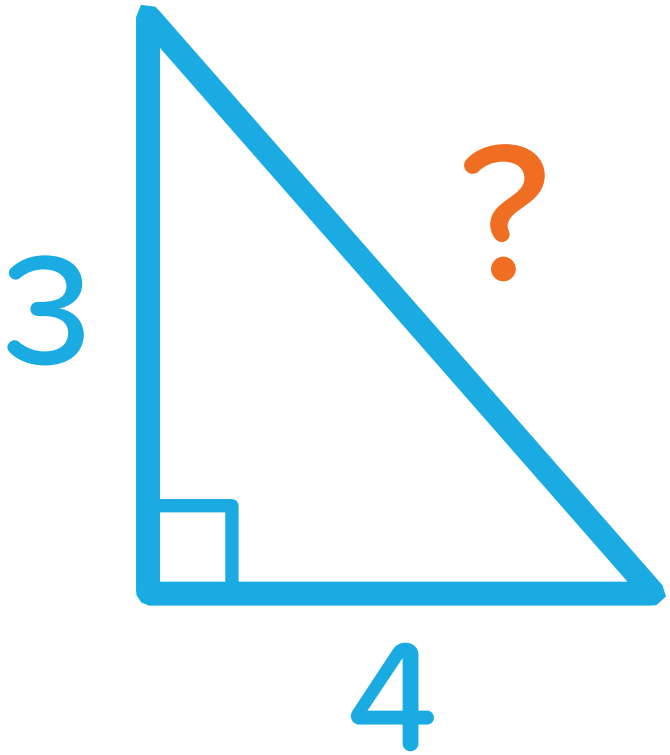
All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

I

$$2^7 \div 2^5$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

J



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

K

Number of cards in a suit

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

L

$$\frac{15!}{14!}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

M

$$1^2 + 2^2 + 3^2$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

N

The 7th Mersenne prime exponent

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

O

Number of sectors on a dart board

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

P

$$\frac{?}{108} = \frac{1}{6}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Q

Number of lines of symetry in this Q

Mathematics. Solved.

MathsConf4 Summer '15

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

R

Number of pounds in a stone

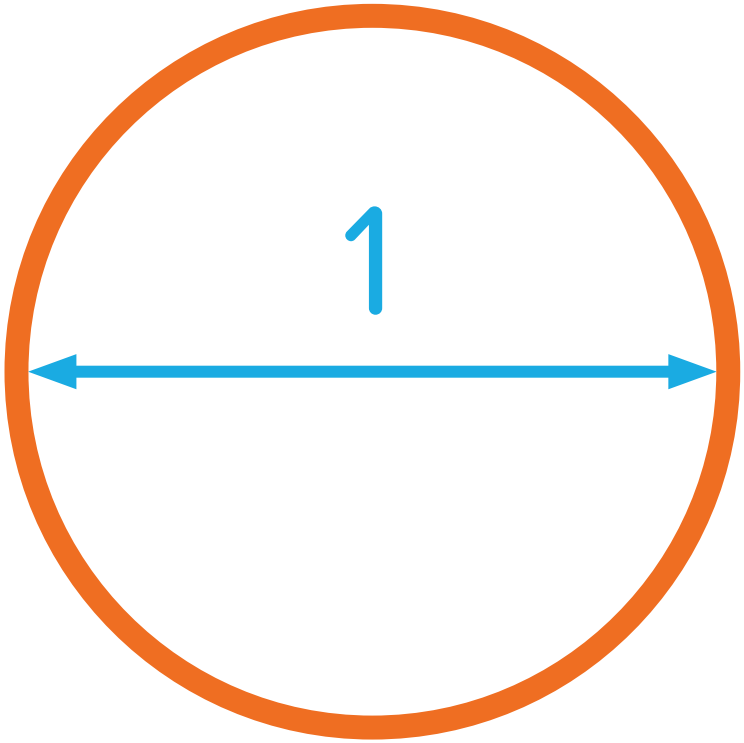
MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Circumference of this circle

Area of this circle



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

T

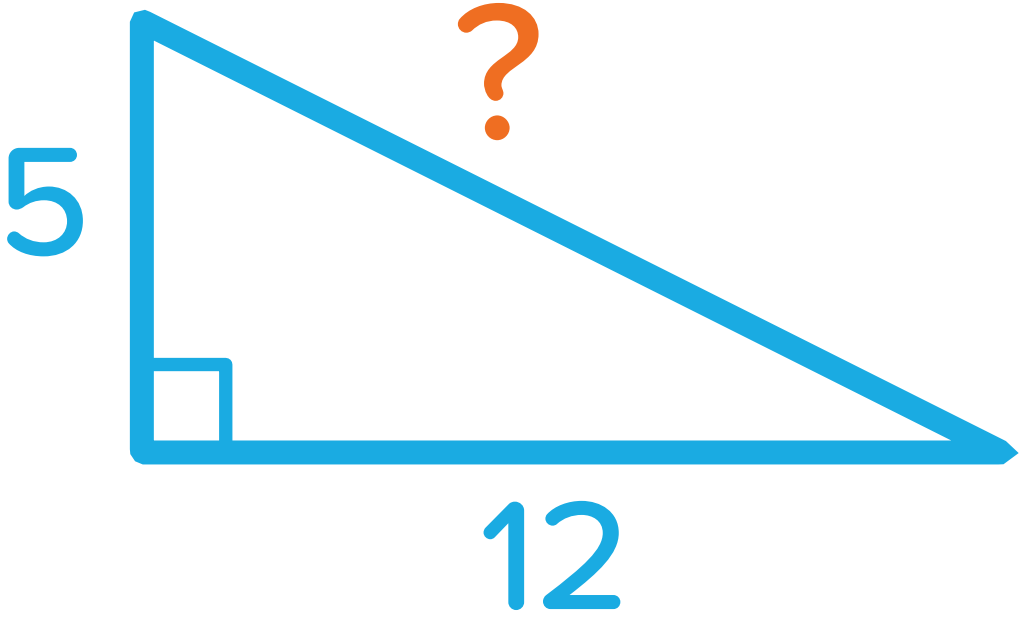
Total number of dots on a standard die

MathsConf4 Summer '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

U



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK ANSWER SHEET

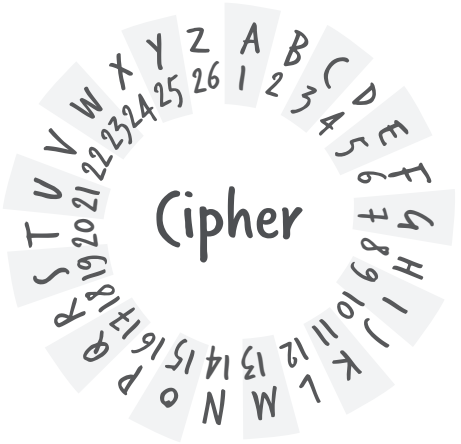
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O

P	Q	R	S	T	U	V	W	X	Y

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf5 Autumn '15

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
K	N	O	W	L	E	D	G	E	E	X	I	S	T	S

P	Q	R	S	T	U	V	W	X	Y
T	O	B	E	S	H	A	R	E	D

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf5 Autumn '15

A

Total number of unique nets of a cube

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

B

$$\frac{B}{6} = 2\frac{1}{3}$$

What is B?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$\frac{LX}{IV}$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

D

$$10 + \sqrt{\text{Number of hours in a week}} + 1$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

E

Number of signs of the zodiac

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

F

The number of olympic rings

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

G

$$16\left(\frac{8^2}{2^8}\right)$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

H

$$\sqrt[3]{343}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

5th Fibonacci number

(starting at 1)

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

J

The formula for this sequence:

-2 , 3 , 8 , 13 , ...

is

Jn - 7

What is J?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

K

4!

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

L

The number of symphonies written by Beethoven

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

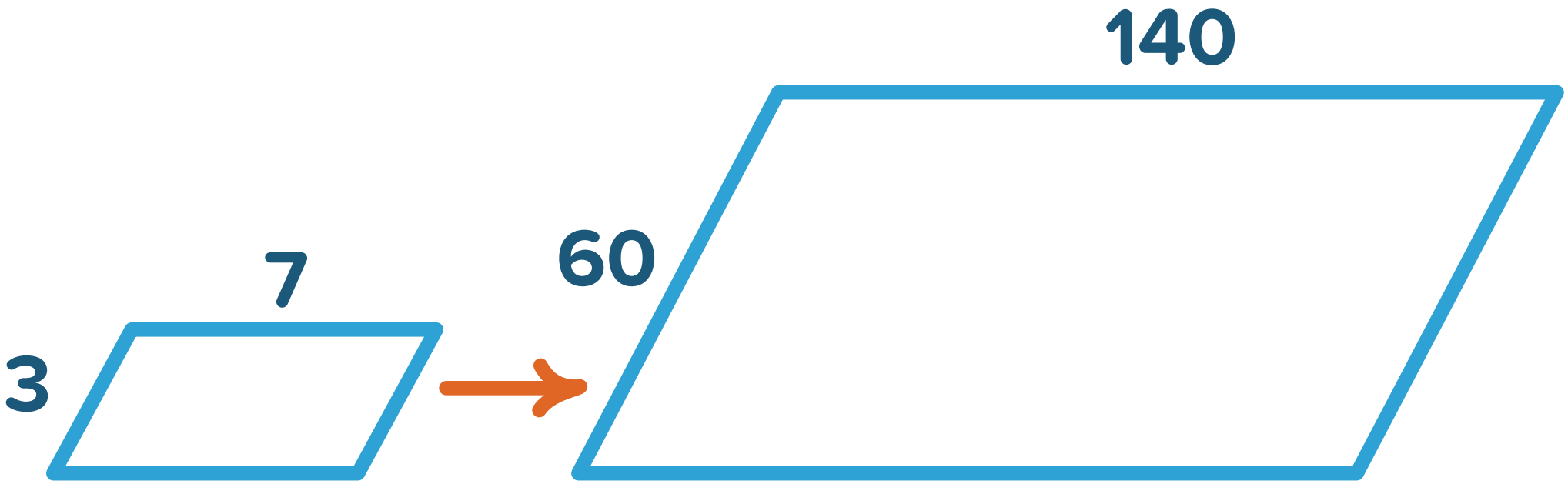
M

$11 \times M = 209$

What is M?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

N



What is the scalefactor?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

O

Diameter

Oπ

What is O?

MathsConf5 Autumn '15

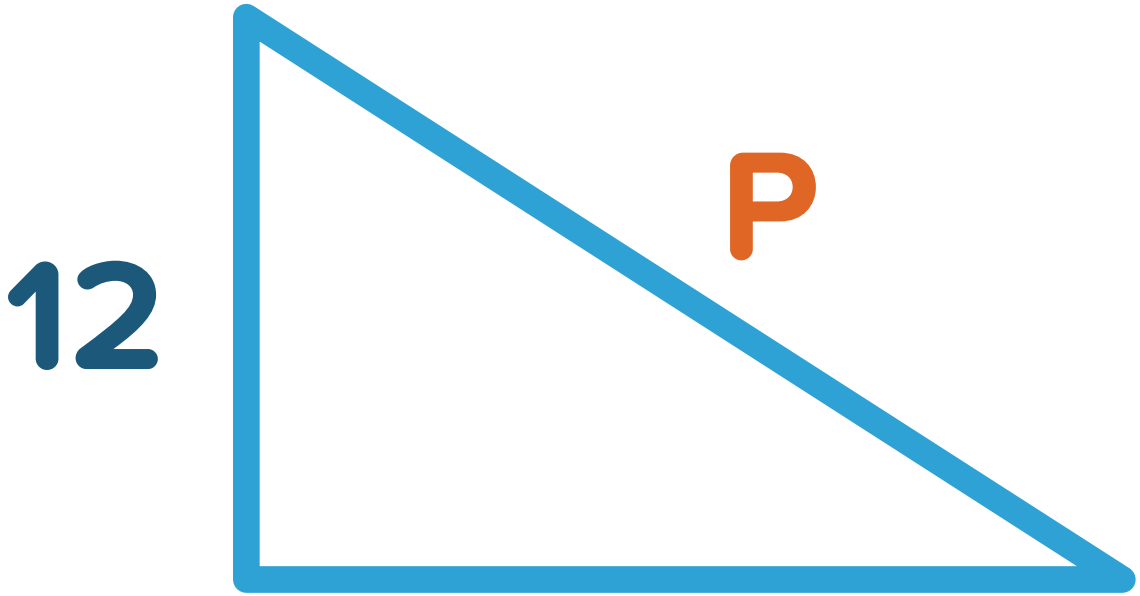
Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

P



What is P?

MathsConf5 Autumn '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Q

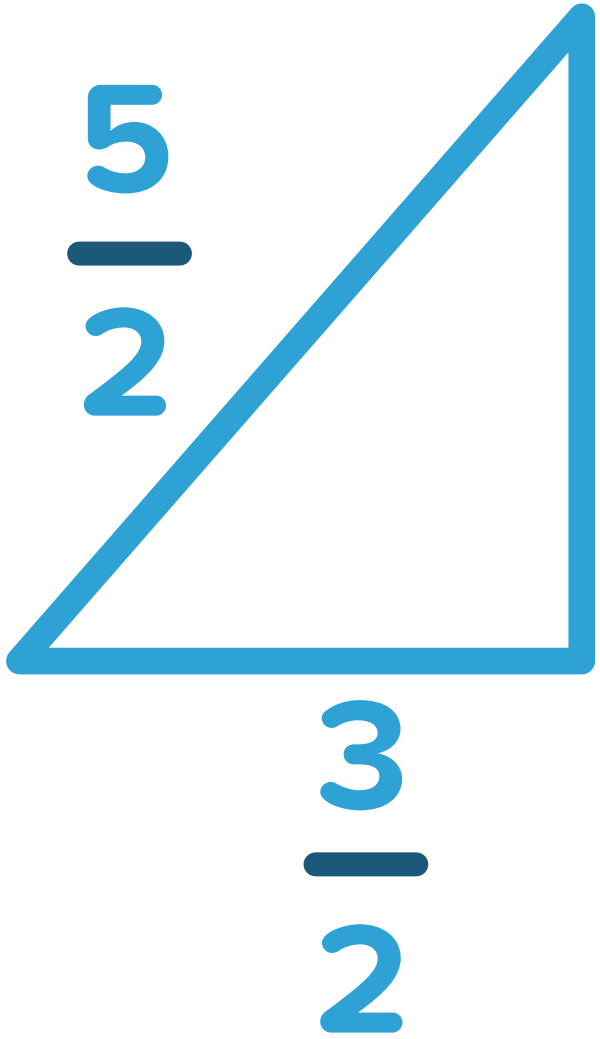
The 5th Triangular Number

MathsConf5 Autumn '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

R



R

What is R?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Number of players in a rugby union team

Number of players in the front row

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

T

$$\frac{38}{\sin\frac{5\pi}{2}} = \frac{T}{\sin\frac{\pi}{6}}$$

What is T?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

U

Number of vertices on a cube

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

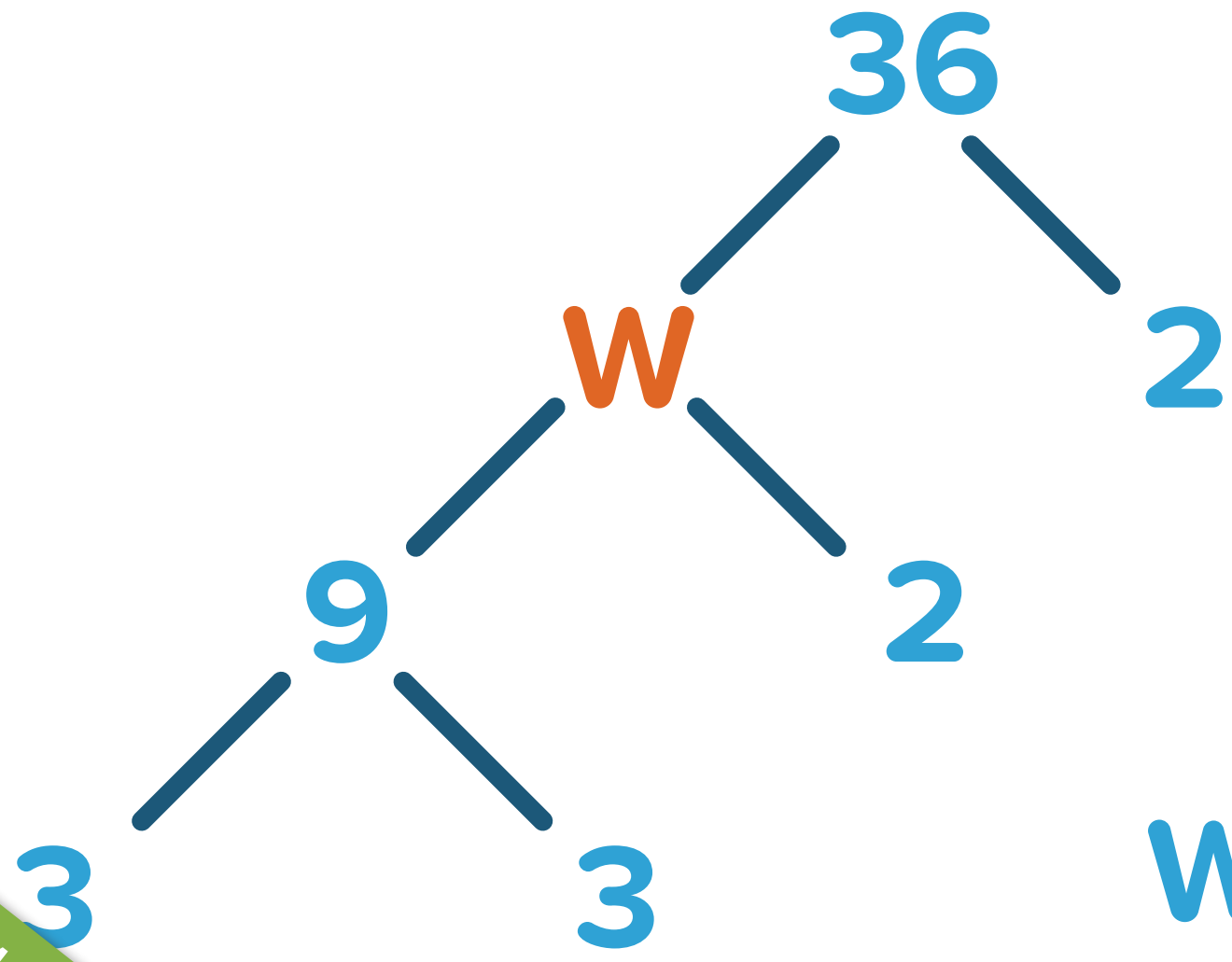
cos 2π

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

W



What is W?

MathsConf5 Autumn '15

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Number of crossings on a pentagram

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Y

$$2\sqrt{Y} = 4$$

What is Y?

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK ANSWER SHEET

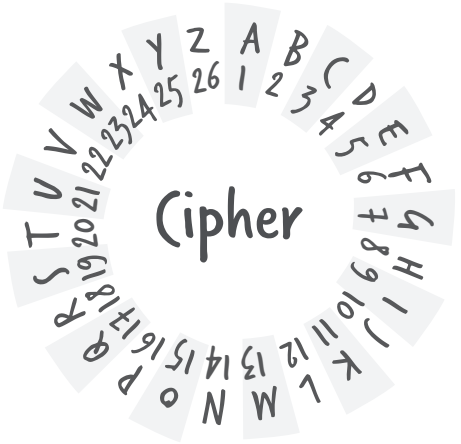
A	B	C	D	E	F	G	H	I	J

K	L	M	N	O	P	Q	R

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf6 Spring '16

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

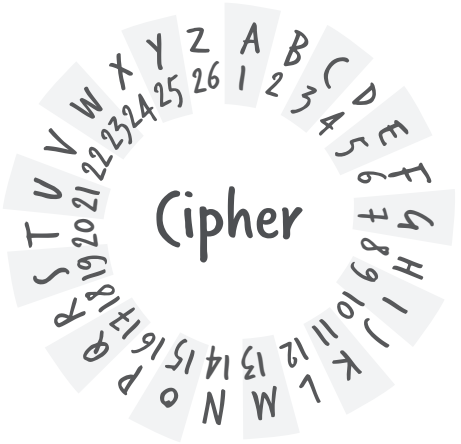
A	B	C	D	E	F	G	H	I	J
H	Y	P	E	R	B	O	L	I	C

K	L	M	N	O	P	Q	R
F	U	N	C	T	I	O	N

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).



MathsConf6 Spring '16

Complete Mathematics

www.CompleteMaths.com

A

The 7th number in the Fibonacci sequence

(Starting at 0)

MathsConf6 Spring '16

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

B

The sum of the first five odd numbers

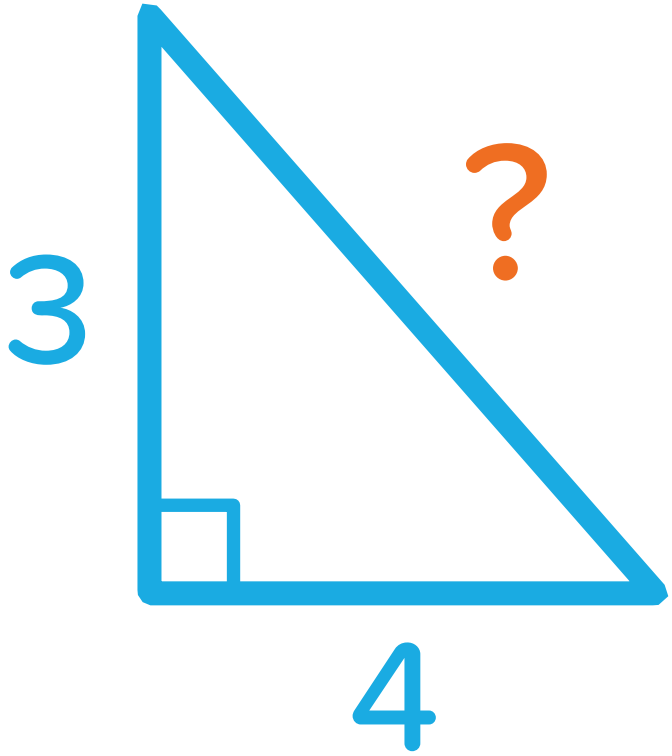
All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

C

$$\sqrt{256}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

D



All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

E

Sum of angles on a straight line (In Degrees)

Sum of first 3 triangular numbers

MathsConf6 Spring '16

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

F

$$\frac{3^2 - 2^3}{3} \times \frac{3!}{1!}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

G

$$3 \times \sqrt[3]{125}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

H

The number of faces on a dodecahedron

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

1

$$\sqrt[3]{512} - e^{i\pi}$$

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Number of faces on a cube

The First Prime Number

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Number of edges on a tetrahedron

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

L

$$\frac{?}{105} = \frac{1}{5}$$

Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$1^2 + 2^2 + 3^2$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Number of primary colours

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

$$\frac{5!}{3!}$$

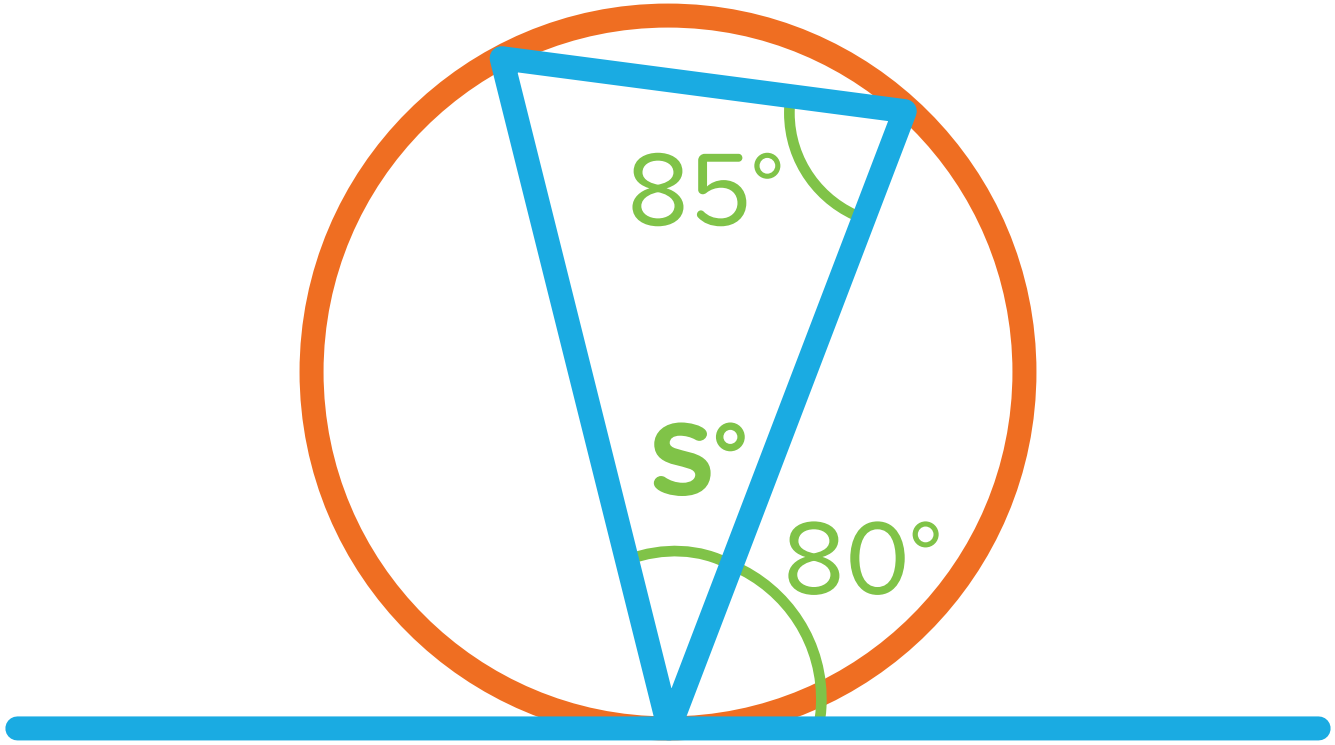
All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

P

The 5th decimal of π

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Q



Mathematics. Solved.

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

R

$$\frac{2^3 - 1}{0.5}$$

All rights reserved. Copyright La Salle Education Ltd - www.lasalle-education.com - No reproduction without permission - 'Complete Mathematics' and its logo are Trademarks of La Salle Education Ltd.

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK ANSWER SHEET

α	β	γ	δ	ϵ	ζ	η	ϑ	ι

κ	λ	μ	ν	ξ	ο	π	ρ	σ

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf7 Summer '16

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

α	β	γ	δ	ϵ	ζ	η	ϑ	ι
H	E	T	E	R	O	S	C	E

κ	λ	μ	ν	ξ	ο	π	ρ	σ
D	A	S	T	I	C	I	T	Y

Work out the answers to the maths problems.

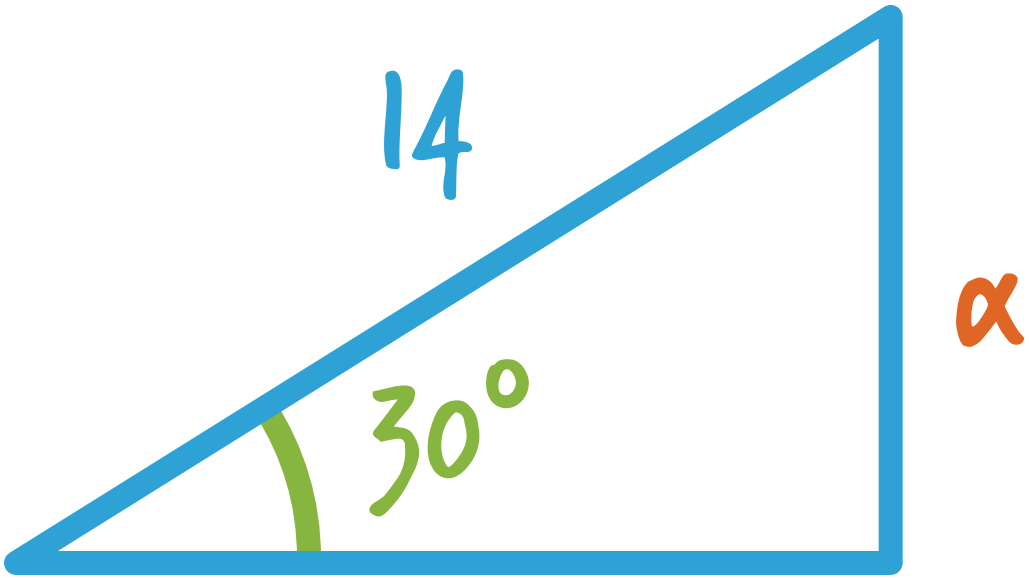
Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf7 Summer '16

Treasure Hunt

α



Complete Mathematics

Treasure Hunt

β

La Salle Education

What is the y coordinate of the intersect of the equations

$y = 2x$ and $y = -x + 6$

?

MathsConf7 Summer '16

Complete Mathematics

Treasure Hunt

γ

La Salle Education

$$2\gamma^2 + 17\gamma + \gamma^2 - 30 = 15\gamma + 8 + 3\gamma^2$$

$$\gamma = ?$$

MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

La Salle Education

Find δ if $\delta > 0$

for $\delta^2 + \delta - 20 = 0$

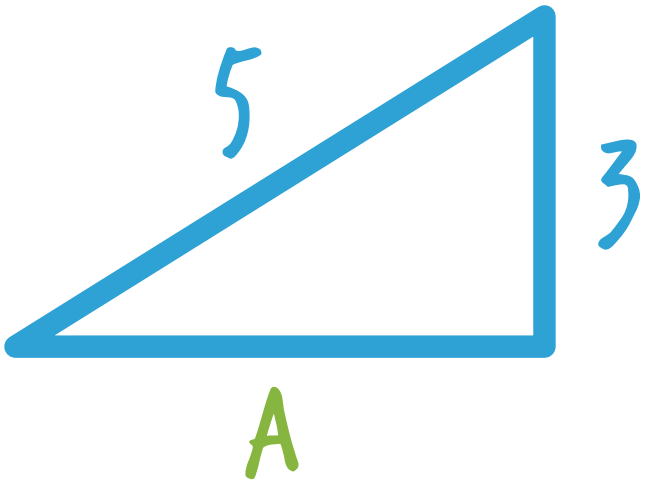
MathsConf7
Summer '16

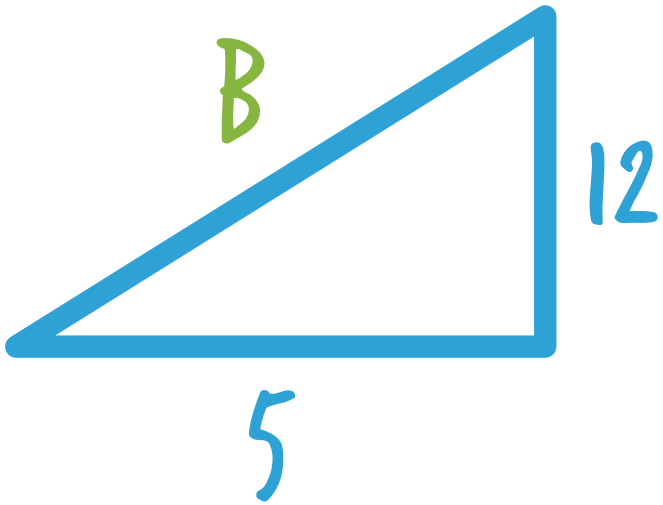
Complete Mathematics

Treasure Hunt

€

La Salle Education





$$A + B = €$$

MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt 7

La Salle Education

Samantha has a bag of sweets she gives half of them to Steven.

Steven eats three and has four left.

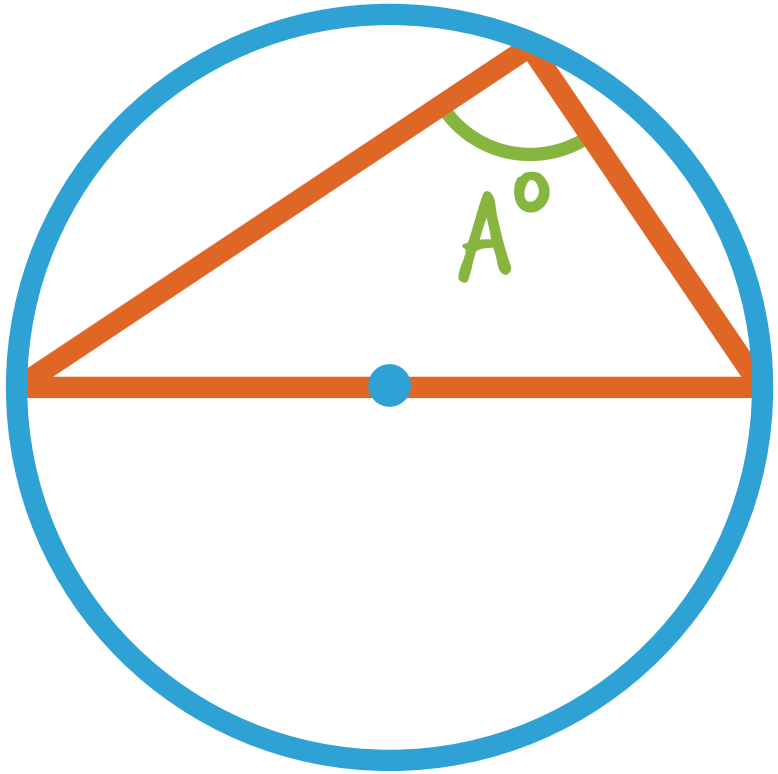
How many sweets did Samantha have to begin with?

Complete Mathematics

Treasure Hunt

La Salle Education

η



$$\frac{A}{5} = \eta$$

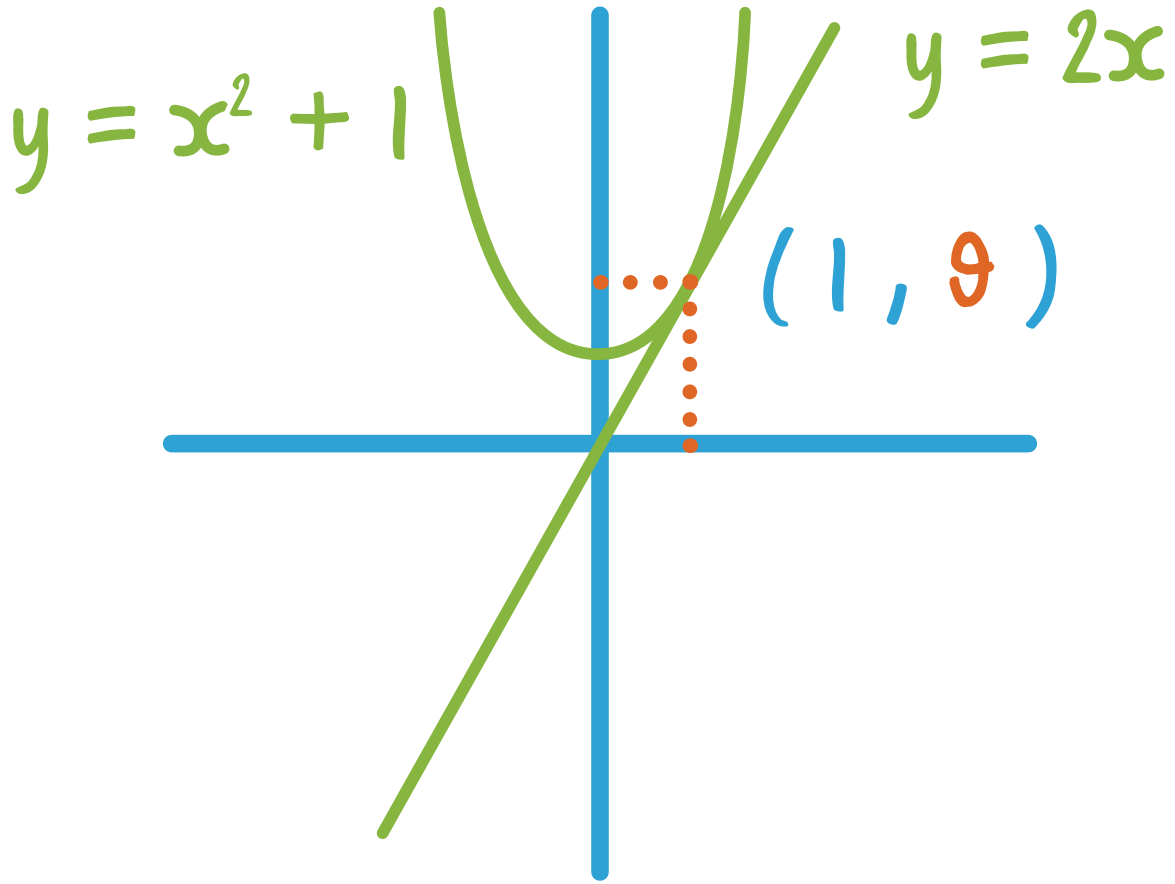
MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

9

La Salle Education



MathsConf7
Summer '16

$$1 = \frac{2^8}{8^2}$$

Complete Mathematics

Treasure Hunt

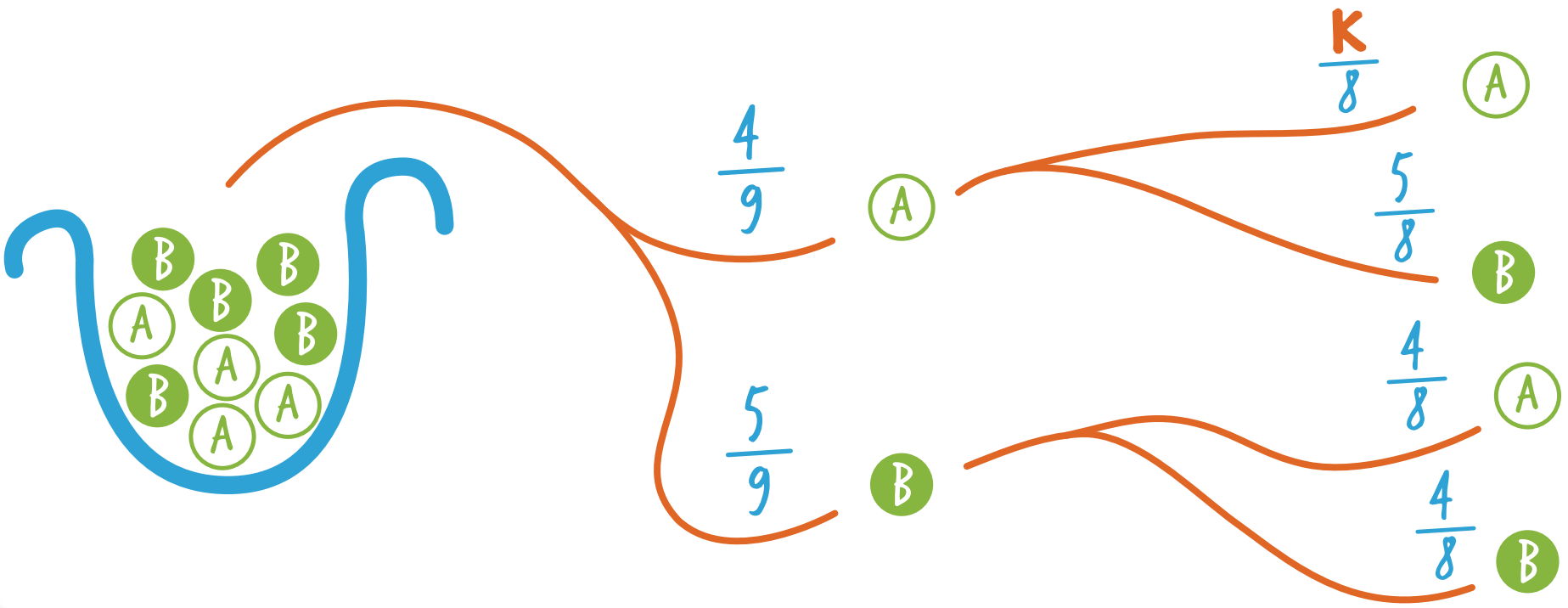
K

La Salle Education

BEFORE

1ST BALL TAKEN

2ND BALL TAKEN



MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

La Salle Education

Find λ where...

$$\left(\frac{3}{4}\right)^{\lambda} = 1$$

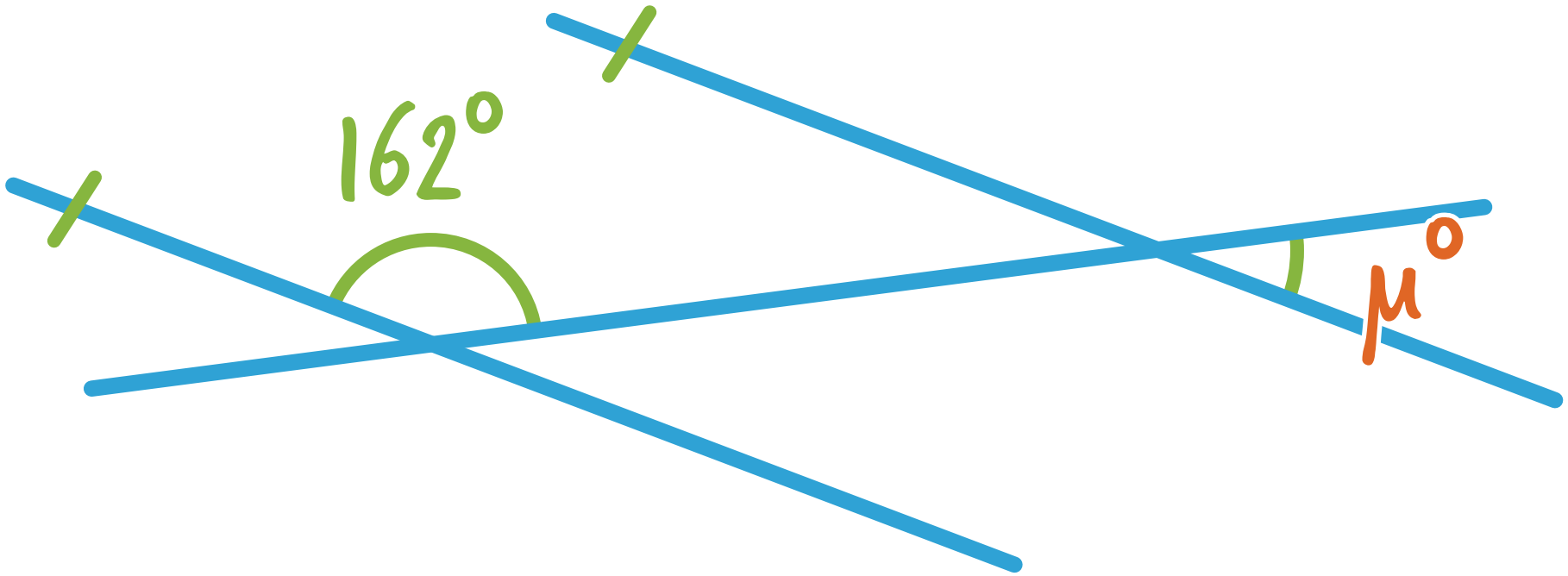
MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

μ

La Salle Education



MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

v

La Salle Education

TERM ①	TERM ②	TERM ③	TERM ④	TERM ⑤	TERM ⑥
4	7	12	v	28	39

Complete Mathematics

Treasure Hunt

La Salle Education

The 7th digit in the Fibonacci Sequence

(Starting at 0)

MathsConf7
Summer '16

Complete Mathematics

Treasure Hunt

0

La Salle Education

What is the missing prime factor of 36?

$$36 = 2 \times 3 \times 3 \times 9$$

MathsConf7 Summer '16

Expand $(1 + 2x)^4$

What is the coefficient of x?

Complete Mathematics

Treasure Hunt

P

La Salle Education

$$\frac{\text{Number of days in a leap year}}{6} - 6\left(\text{Number of Months with 31 days}\right)$$

MathsConf7 Summer '16

Complete Mathematics

Treasure Hunt

σ

La Salle Education

$$\frac{12!}{11!} + \frac{4!}{2!}$$

MathsConf7 Summer '16

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

BLANK **ANSWER** SHEET

α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ

ν	ξ	ο	π	ρ	σ	τ	υ	φ	χ	ψ

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf8 Autumn '16

Complete Mathematics

www.CompleteMaths.com

Treasure Hunt!

Your name:

FILLED ANSWER SHEET

α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ
G	O	T	T	F	R	I	E	D	W	I	L

ν	ξ	ο	π	ρ	σ	τ	υ	φ	χ	ψ
H	E	L	M	L	E	I	B	N	I	Z

Work out the answers to the maths problems.

Every problem is marked with a different letter corresponding to the boxes above.

Transpose the solution of the problem to a letter using the cipher (right) and enter it under the appropriate box to reveal the word(s).

MathsConf8 Autumn '16

Complete Mathematics

Treasure Hunt

α

La Salle Education

$$3\left(\sqrt[3]{8}\right)$$

MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

β

La Salle Education

Number of faces on a tetradecahedron

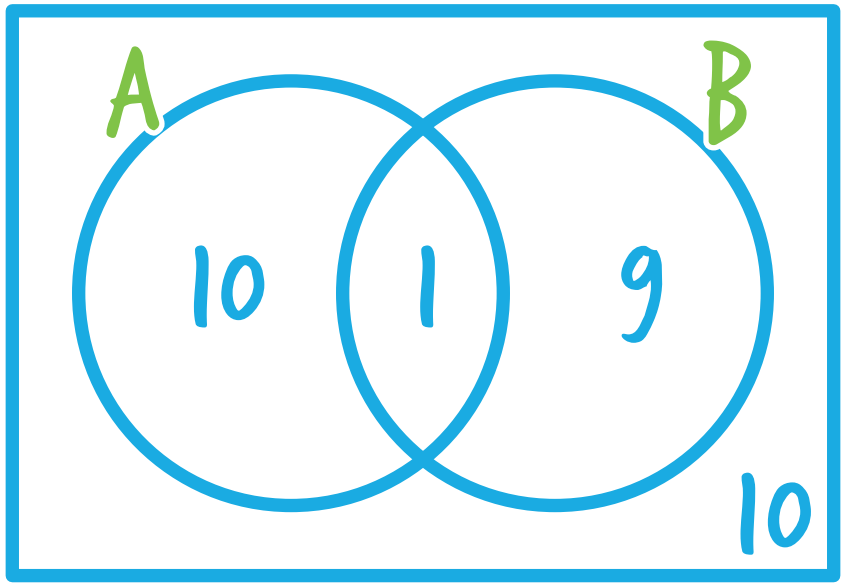
MathsConf8 Autumn '16

Complete Mathematics

Treasure Hunt

La Salle Education

Y



$$P(A') = \frac{Y}{30}$$

MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

δ

La Salle Education

$$\sqrt{(20^2 - 39)}$$

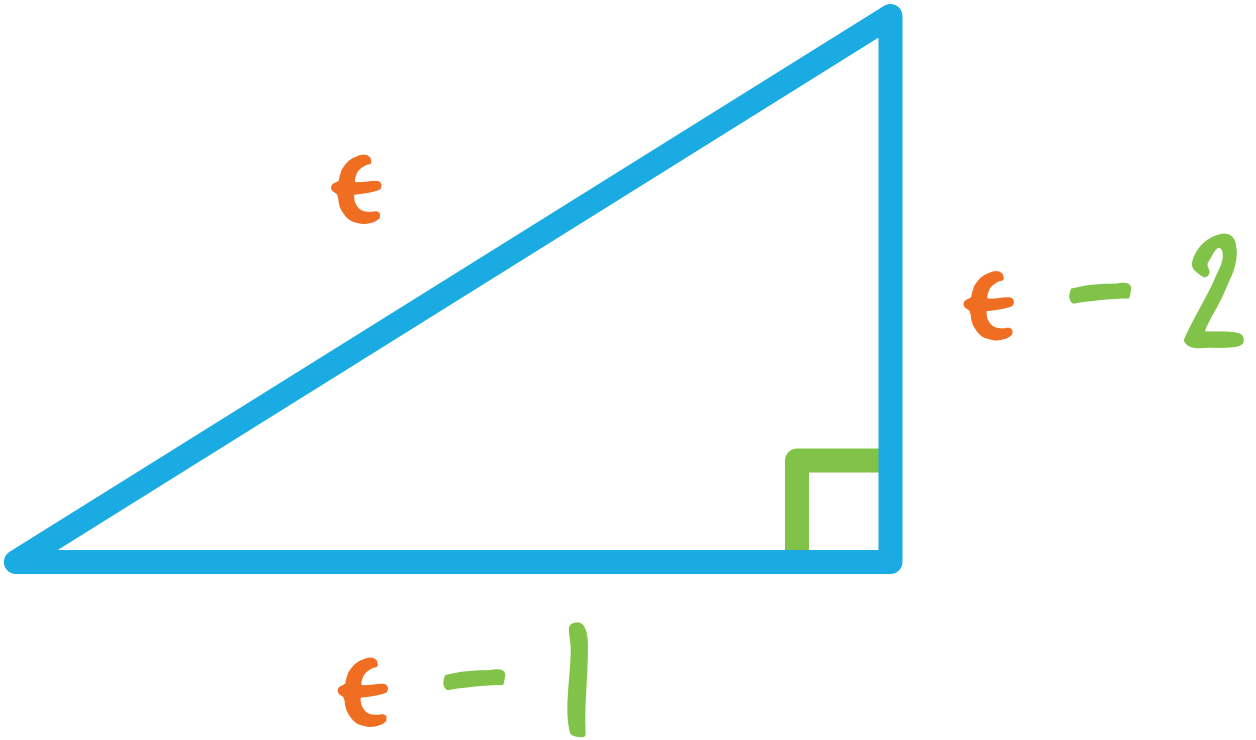
MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

€

La Salle Education



MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

5

La Salle Education

$$23 + 7 = 41$$

Complete Mathematics

Treasure Hunt

η

La Salle Education

The first number which is neither prime nor semiprime

MathsConf8 Autumn '16

Complete Mathematics

Treasure Hunt 9

La Salle Education

(smallest perfect number) - 2

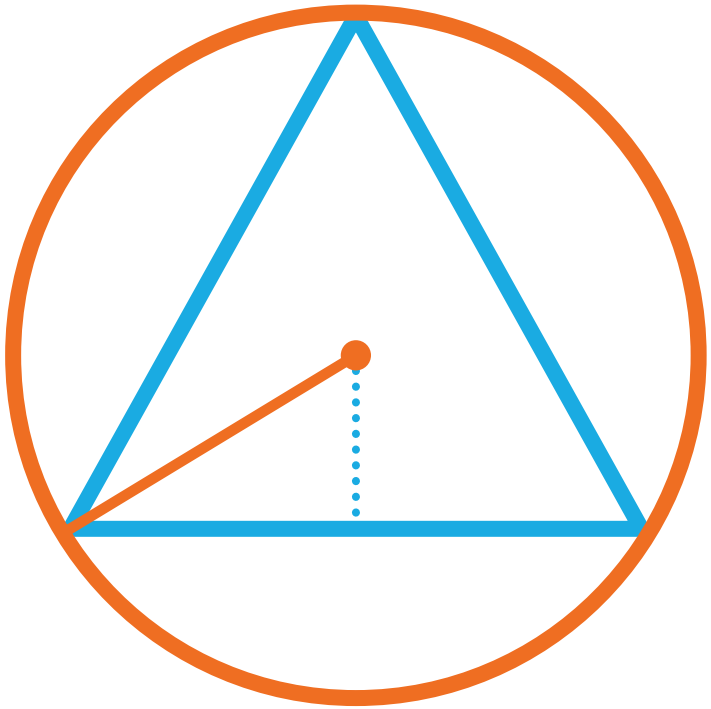
MathsConf8 Autumn '16

Complete Mathematics

Treasure Hunt

1

La Salle Education



Area of Circle $= 4\pi$

Area of Equilateral Triangle $= y\sqrt{y}$

What is y?

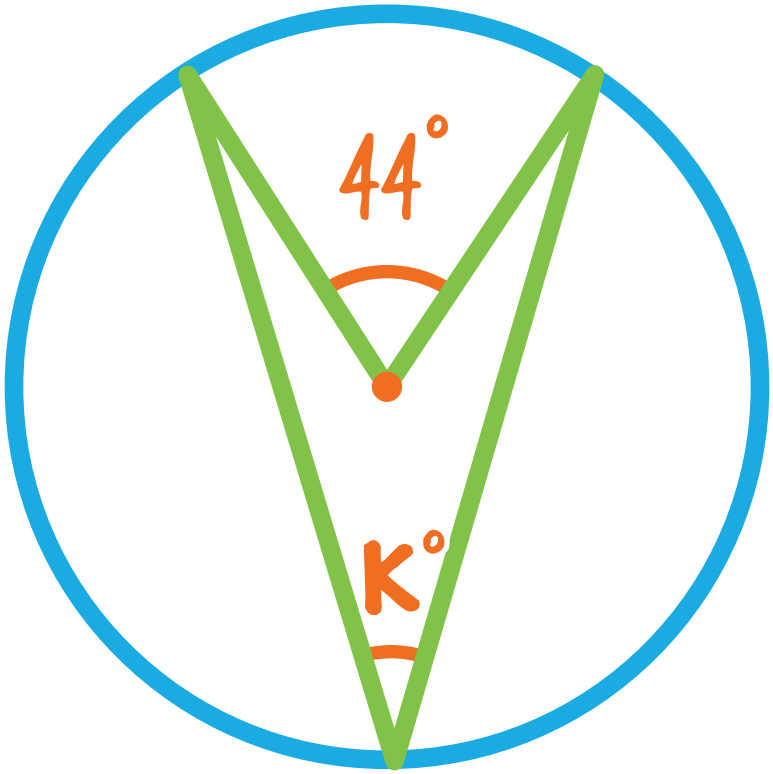
MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

K

La Salle Education



MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

La Salle Education

$$\lambda = 8y^{0}$$

MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

μ

La Salle Education

$(\sqrt{27} - 4)$

Area = μ

$(\sqrt{27} + 4)$

MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

V

La Salle Education

$$\frac{4! + 3! - 2!}{2^2}$$

Complete Mathematics

Treasure Hunt

La Salle Education

$$(10^{0}) + (2\sqrt{9}) \div (\sqrt[3]{8})$$

MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

0

La Salle Education

$$12^2 - 11^2 - 3^2 - 2^2 + 1^2$$

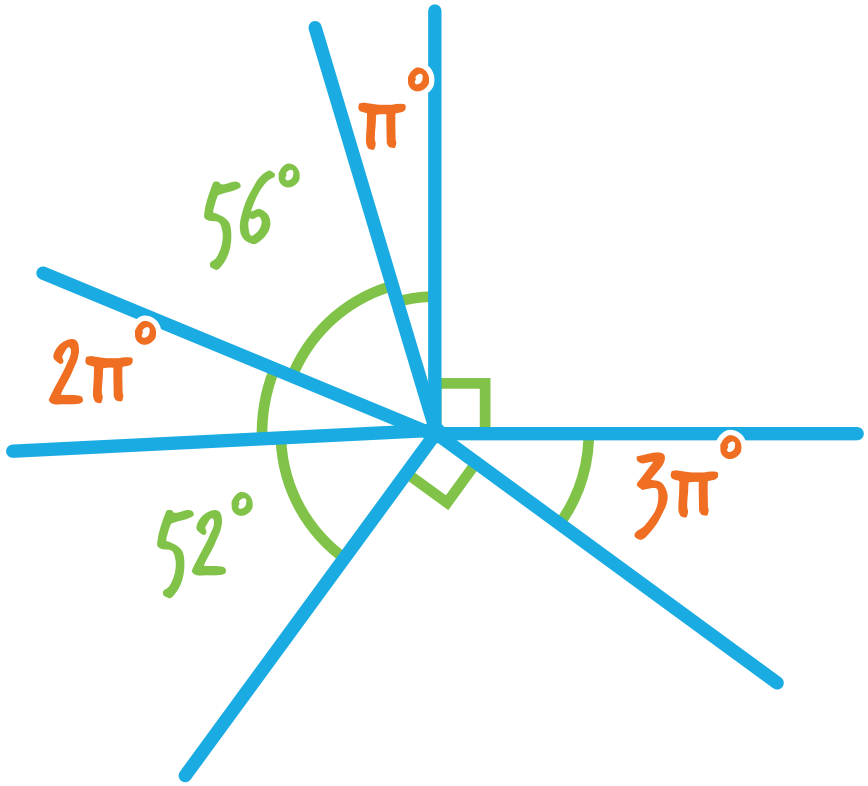
MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

π

La Salle Education



MathsConf8
Autumn '16

Complete Mathematics

Treasure Hunt

P

La Salle Education

$$\sum_{i=3}^{6}$$ Fibonacci numbers (starting at 0)

MathsConf8 Autumn '16

Complete Mathematics

Treasure Hunt

σ

La Salle Education

$$(y + \sigma)(y - 4) = y^2 - 16$$

Complete Mathematics

Treasure Hunt

τ

La Salle Education

The number of vertices on a cube

MathsConf8 Autumn '16

$$(i^2)^2$$

Complete Mathematics

Treasure Hunt

φ

La Salle Education

The number of sides on a icosagon

−

The number of sides on a 20p coin

Complete Mathematics

Treasure Hunt

X

La Salle Education

CLII / XIX

MathsConf8 Autumn '16

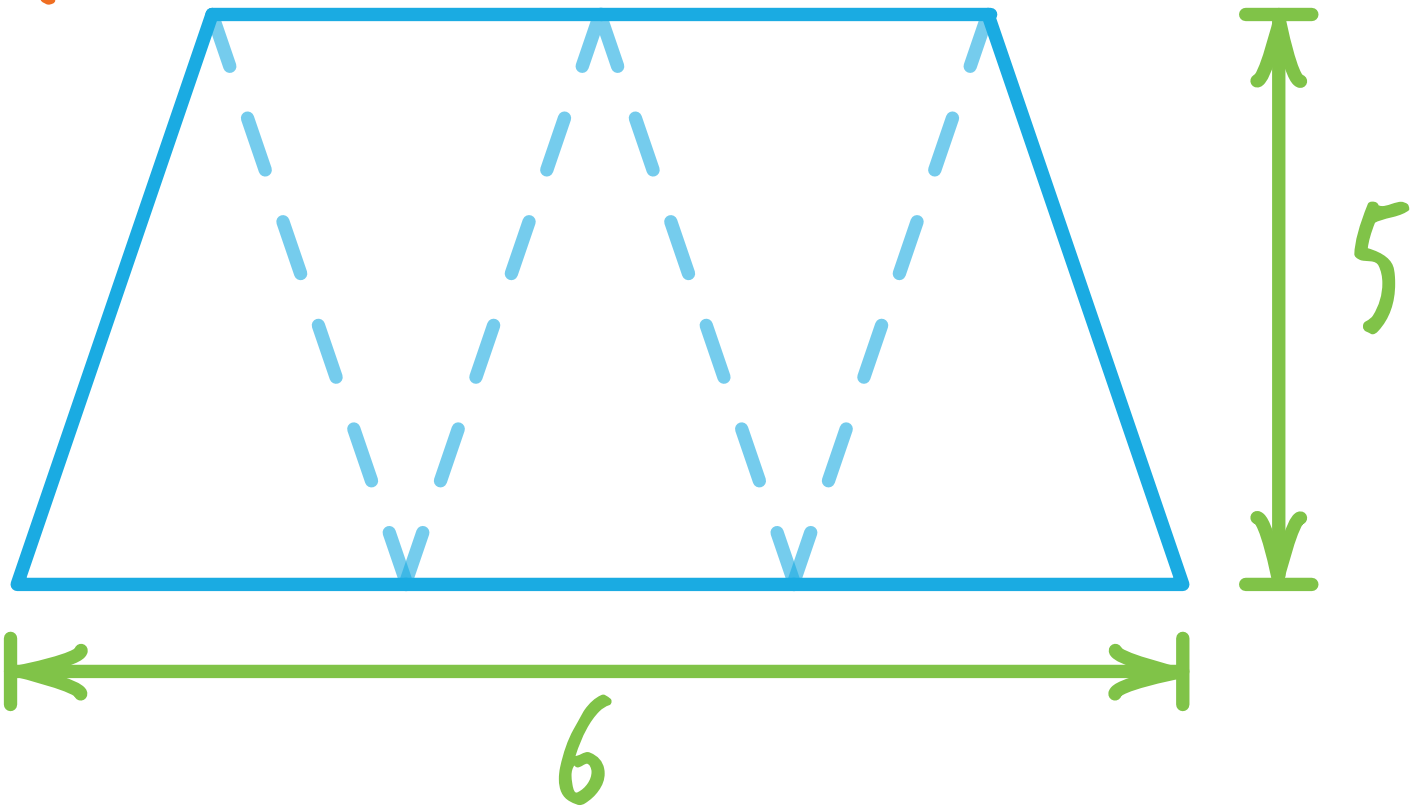
Complete Mathematics

Treasure Hunt

La Salle Education

AREA = ψ

(all triangles are the same)



MathsConf8 Autumn '16