## JCOL BASIC SKILLS - PACK 3

## Topics

Graphs of Story - Can I interpret the graph of a story?
1 - 2015 JCOL Paper 1 - Question 8 (a)
Probability - Can I apply the Fundamental Principal of Counting?
2 - 2019 JCOL Paper 2 - Question 8 (b)
Number and Arithmetic - Can I divide a given amount into a given ratio?
3 - 2011 JCOL Paper 1 - Question 2 (a)
Trigonometry - Can I use Pythagoras to find the length of the hypotenuse?
4 - 2014 JCOL Paper 2 - Question 13 (ii)
Statistics - Can I find the mean of a set of data?
5 - 2017 JCOL Paper 2 - Question 5 (b) (i)
www.mathspoints.ie for worked solutions to these questions.
$\square$ JCOL Resources by Topic
$\square$ JCOL Revision - 50 Common Questions
$1-2015$ JCOL Paper 1 - Question 8 (a)
Gráinne is taking part in a training session.
The graph shows the distance she travelled during the session.
The four parts of the graph are labelled A, B, C, and D.


Write the letters A, B, C, and D into the table to match each description with the correct part of the graph.

| Description | Part of the Graph |
| :--- | :--- |
| Gráinne runs for 20 minutes |  |
| Gráinne stops for 15 minutes |  |
| Gráinne walks for 10 minutes |  |
| Gráinne stops for 5 minutes |  |

$2-2019$ JCOL Paper 2 - Question 8 (b)
A shop sells chicken wraps.
There are four different sauces and three different types of chicken, as shown in the table.

| Sauce | Chicken |
| :---: | :---: | :---: |
| BBQ Sauce | Plain |
| Mayonnaise | Fried |
| Hot Sauce | Tikka |
| Sweet Chilli |  |

Margaret picks one sauce and one type of chicken.
(i) Fill in the spaces below to show three different combinations that Margaret could pick. One is already done.

(ii) Work out the total number of different possible combinations that Margaret could pick.

$3-2011$ JCOL Paper 1 - Question 2 (a)
$€ 52$ is divided between Fiona and Orla in the ratio $9: 4$.
How much does each receive?

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## 4 - 2014 JCOL Paper 2 - Question 13 (ii)

A circular table is shown in the diagram below. Aoife is trying to find the centre of the table.
She constructs the right-angled triangle $P Q R$ as shown, with $|Q R|=1 \mathrm{~m}$ and $|\angle R Q P|=90^{\circ}$.
She measures $[Q P]$, and finds that $|Q P|=0.75 \mathrm{~m}$.
Use the Theorem of Pythagoras to calculate the length $|P R|$.
Give your answer in centimetres.



5 - 2017 JCOL Paper 2 - Question 5 (b) (i)
There are 15 boxers in a boxing club. The weight of each boxer (in kg ) is shown in the table below.

| 47 | 49 | 49 | 50 | 56 |
| :--- | :--- | :--- | :--- | :--- |
| 57 | 58 | 65 | 67 | 68 |
| 69 | 69 | 69 | 75 | 79 |

Work out the mean weight of the 15 boxers.


