**TGAU MATHEMATEG**

**Pecyn 10 am 10**

**Deg munud y dydd am ddeg dydd**



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| **Yr Adran****Fathemateg** |  |

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 1** |

**1.** Mewn cyngerdd ysgol un noson, roedd y gynulleidfa wedi’i chreu o’r canlynol:

$\frac{1}{4}$ yn ddynion, $\frac{3}{5}$ yn fenywod a’r gweddill yn blant.

(a) (i) Pa ganran o’r gynulleidfa sy’n blant?

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(ii) Pa ffracsiwn o’r gynulleidfa sy’n blant?

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(b) Y noson ganlynol, mae’r gynulleidfa wedi’i chreu yn ôl y gymhareb ganlynol:

dynion : menywod : plant = 2 : 4 : 4

 Mae 270 o bobl yn y gynulleidfa.
Cyfrifwch nifer y dynion.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 1** |

**2.** (a) Mae Miss Evans yn ennill £240 yr wythnos.
Mae’n cael codiad cyflog o 3.5%.

 Mae Mr Evans yn ennill £220 yr wythnos.
Mae’n cael codiad cyflog o 4%.

 Cyflog pwy sy’n cynyddu fwyaf?

 **Rhaid** i chi ddangos eich holl waith cyfrifo.

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Ateb ..................................................................

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(b) Yn 2003 cynyddwyd y Pensiwn Gwladol gan 2% i £78.03.
Beth oedd y Pensiwn Gwladol cyn y cynnydd hwn?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 2** |

**3.** Yn y flwyddyn 1900, gwnaed amcangyfrifon ar gyfer nifer tri math gwahanol o forfilod. Gwnaed yr amcangyfrifon eto yn 1993.

 Ni ddangosir y wybodaeth ar gyfer Morfilod Sei ar y diagram.



(a)Darganfyddwch y ffracsiwn canlynol, gan roi eich ateb ar ei ffurf symlaf.

Nifer y Morfil Ffin yn 1993

Nifer y Morfil Ffin yn 1900

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(1)

(b)Cyfrifwch y gostyngiad canrannol yn nifer y Morfilod Ffin rhwng blynyddoedd 1900 a 1993.

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(c)Cymhareb Morfilod Sei 1900 i Forfild Sei 1993 yw 5: 1.

 Cyfanswm y Morfilod ar gyfer y ddwy flwyddyn yma oedd 300,000.

 Faint o Forfilod Sei a amcangyfrifwyd yn 1900?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 2** |

**4.** Mae James yn buddsoddi £700 am 2 flwyddyn ar gyfradd adlog o 10% y flwyddyn. Faint o log y mae’n ennill?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 3** |

**5.** Gwerthir iogwrt mewn potiau bach a photiau mawr.

(a) Mae pot bach yn costio 20c.
Mae pot mawr yn costio 150% **yn fwy.**Faint ydy pot mawr yn ei gostio?

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(b) Cymhareb pwysau pot bach i bwysau pot mawr yw 3 : 11.
Pwysau pot bach yw 120 g.

 Beth yw pwysau pot mawr?

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Ateb ................................................. g

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(c) Mae pwysau’r pot bach wedi fesur yn gywir i’r gram agosaf.

 Beth yw pwysau lleiaf posif y pot bach?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 3** |

**6.** Cyfrifwch:



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1. 24% o 35 metr.

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1. ddegolyn:

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1. canran:

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 4** |

**7.**



Mae’r diagram yn dangos triongl ongl sgwâr ABC a chylch.

Mae *A*, *B* a *C* yn bwyntiau ar gylchedd y cylch.

*AC* yw diamedr y cylch.

Darganfyddwch hyd AC..

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Gan gymryd bod  tua 3.14

Cyfrifwch arwynebedd rhan dywyll y cylch.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 4** |

**8.** Mae Sidney yn gosod gwaelod ei ysgol ar lawr llorweddol a’r brig yn erbyn wal fertigol.

Hyd yr ysgol yw 16 troedfedd.

 Mae troed yr ysgol 4 troedfedd oddi wrth gwaelod y wal.

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**(a)** Cyfrifwch pa mor uchel i fyny’r wal y mae’r ysgol yn cyrraedd.

 Rhowch eich ateb yn gywir i 3 ffigur ystyrlon.

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**(b)** Cyfrifwch yr ongl y mae gwaelod yr ysgol yn gwneud gyda’r llawr.

 Rhowch eich ateb yn gywir i 3 ffigur ystyrlon.

***(Rhowch gynnig ar hyn dim ond os ydych yn sefyll y papur Haen Uwch.)***

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 5** |

**9.** Mae’r diagram yn dangos lluniad prism trionglog.



(a)Cyfrifwch arwynebedd triongl *ABC*.

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(b)Cyfrifwch gyfaint y prism.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 5** |

**10.** Mae’r diagram yn dangos silindr.



 Uchder y silindr yw 26.3 cm.

 Diamedr gwaelod y silindr yw 8.6 cm.

 Cyfrifwch gyfaint y silindr.

 Rhowch eich ateb yn gywir i 2 le degol.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 6** |

**11.** (a) Mae gan y triongl isod onglau *x*°, 2*x*° a 84° fel a ddangosir.
Cyfrifwch werth *x*.



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Ateb .................................................... gradd

(3)

 (b)Datryswch5(2*x* – 1) = 35,

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(c)Datryswch4*x* + 3 = 18 – 2*x*.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 6** |

**12.** Onglau pedrochr yw 73°, 2*x*°, 3*x*° a 102°.



1. Ysgrifennwch hafaliad y mae *x* yn bodloni.

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(b) Defnyddiwch eich hafaliad i ddarganfod maint ongl fwyaf y pedrochr.

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 (c) Datryswch

  =  7.4

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 7** |

**13.** (a) Symleiddiwch

10*d* + 3*e* – 2*d* – 7*e*

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 (2)

(b) (i) Ehangwch a symleiddiwch (2*x*  3)(3*x* + 5)

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 (3)

 (ii) Ehangwch a symleiddiwch (*n* + 3)2

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 (3)

(c) Symleiddiwch

(i) *y*4  *y*-3

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 (1)

(ii) *y*4  *y*5

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 (1)

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 7** |

**14.** (a) Ehangwch a symleiddiwch

*x*(2*x* – 3) + 4(*x*2 + 1)

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(3)

 (b) Ffactoriwch 4*c* + 64

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(1)

(c) Ffactoriwch *x*2 + 5*x*

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(d) Ffactoriwch 8*x*3*y*2 – 4*xy*3

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 8** |

**15.** Mae James yn plannu hadau cennin pedr.

 Mae’n plannu dwy hedyn ym mhob pot.

 Y tebygolrwydd y bydd hedyn yn tyfu yw 

 Mae’r diagram cangen tebygolrwydd isod yn dangos y canlyniadau ar gyfer y ddau hedyn yn y pot.

(a) Cwblhewch y diagram cangen tebygolrwydd.



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(b) (i) Beth yw’r tebygolrwydd y bydd y ddwy hedyn yn tyfu?

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(2)

(ii) Beth yw’r tebygolrwydd y bydd o leiaf un hedyn yn tyfu?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 8** |

**16(i).** Lluniodd Ruth droellwr gyda’r lliwiau coch, gwyrdd a glas arno.
Cynhaliodd brawf arni gan ei droelli 500 gwaith.

 Dyma ei chanlyniadau

glanio 227 gwaith ar wyrdd

glanio 175 gwaith ar glas

glanio 98 gwaith ar goch.

(a) Amcangyfrifwch y tebygolrwydd y bydd y troellwr yn glanio ar las.

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 (2)

(b) Mewn gêm, defnyddir y troellwr 100 o weithiau.
Faint o weithiau y byddech yn disgwyl i’r troellwr lanio ar las?

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(2)

**16(ii).** (a) Mae tri cherdyn wedi’u rhifo 1, 3 a 4. Mae tri disg wedi’u rhifo 2, 4 a 5.

1

3

4

2

4

5

 Mewn gêm mae angen dewis un cerdyn ac un disg ar hap. Mae’r rhifau ar y cerdyn a’r disg yn cael eu hadio.

Cwblhewch y tabl isod i ddangos yr holl bosibiliadau.

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|  |  | Disg |
|  |  | 2 | 4 | 5 |
| Cerdyn | 1 | 3 |  |  |
|  | 3 |  |  |  |
|  | 4 |  |  |  |

**(b)** Beth yw’r tebygolrwydd o gael cyfanswm sy’n eilrif?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 9** |

**17.** Ysgrifennwch y rheol *n*fed term ar gyfer y dilyniannau canlynol.

(a) 3, 6, 9, 12 ....…..

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(b) 1, 4, 7, 10 ....……

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(c) 1, 4, 9, 16, ………

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(d) 4, 16, 36, 64, ………

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 9** |

**18.** Dangosirdilyniant o rifau isod.

 Y ddau derm cyntaf yw 3 a 4.

 Mae gweddill y termau yn cael eu cyfrifo trwy adio’r ddau rif blaenorol.

3, 4, 7, 11, 18, 29, . . .

(a) Ysgrifennwch ddau derm nesaf y dilyniant.

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(1)

(b) Defnyddir y rhifau o’r dilyniant cyntaf i greu termau ail ddilyniant, fel a ddangosir isod.

 Rhoddir y termau i 2 le degol.

 4 ÷ 3 = 1.33

 7 ÷ 4 = 1.75

 11 ÷ 7 = 1.57

(i) Cyfrifwch dri therm nesaf yr ail ddilyniant hwn.

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(ii) Ysgrifennwch yr hyn a sylwch am y termau yn yr ail ddilyniant.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 10** |

**19.** Safodddeg ddisgybl ddau bapur arholiad mewn Mathemateg.

 Nodir eu marciau, allan o 50, isod.



(a) Ar y grid isod, lluniwch ddiagram gwasgariad o’r marciau hyn.



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(b) Lluniwch linell ffit orau ar gyfer y data hwn.

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Di-gyfrifiannell** | **DYDD 10** |

(c) Roedd Omar yn absennol ar gyfer Papur 2. Cafodd farc o 32 ar Bapur 1.

(i) Pa farc y credwch y byddai wedi’i ennill ar Bapur 2?

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(ii) Nodwch sut y cawsoch eich ateb.

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(ch) Safodd y disgyblion hyn bapur arholiad hefyd mewn Celf ac un arall mewn Cemeg.
Llunir diagram gwasgariad ar gyfer y marciau hyn.
Sut gall y diagram gwasgariad hwn fod yn wahanol i’r un a luniwyd ar gyfer y papurau Mathemateg?

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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 10** |

**20.** Dosberthirgwledydd y bydd i grwpiau ‘datblygedig’ a ‘llai datblygedig’.

 Mae’r tabl amlder isod yn dangos dosraniad oedrannau’r boblogaeth ar gyfer y gwledydd datblygedig.

 Mae’r ffigurau mewn canrannau, ac yn amgyfrifon ar gyfer y flwyddyn 1985.

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| Oedran(*y* blwydd) | Canran y boblogaeth | Canran cronnus |
| 0 < *y*  15 | 19 |  |
| 15 < *y*  30 | 22 |  |
| 30 < *y*  45 | 20 |  |
| 45 < *y*  60 | 17 |  |
| 60 < *y*  75 | 11 |  |
| 75 < *y*  90 | 9 |  |
| 90 < *y*  105 | 2 |  |

(a) Lluniwch bolygon amlder cronnus i ddangos y wybodaeth hon.



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| **10 am 10** | **Mathemateg Blwyddyn 11: adolygu dros y gwyliau****Gyda Chyfrifiannell** | **DYDD 10** |

 (b) (i) Beth oedd yr oedran canolrifol ar gyfer gwledydd datblygedig yn 1985?

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 **(1)**

(ii) Yr oedran canolrifol ar gyfer y boblogaeth mewn gwledydd llai datblygedig yn 1985 oedd 21.

 Beth ydy’r ddau oedran canolrifol yn dweud wrthych am y gwahaniaeth rhwng y boblogaeth yn y gwledydd datblygedig a’r boblogaeth yn y gwledydd llai datblygedig?

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| Answers | Online Revision Resources |
| DYDD 1:Day 1 | **Fraction**<http://studymaths.co.uk/workout.php?workoutID=11>**Percentage – convert fraction, decimal, percentage**Notes<http://studymaths.co.uk/keytopics/fractionsdecimalspercentages.html> Worksheet<http://studymaths.co.uk/workout.php?workoutID=80> **Ratio**<http://studymaths.co.uk/workout.php?workoutID=116> **Percentage of an amount** <http://studymaths.co.uk/workout.php?workoutID=38> **Find the original after a percentage change**Notes<http://studymaths.co.uk/keytopics/percentagechange.html> Worksheet<http://studymaths.co.uk/workout.php?workoutID=78> |
| DYDD 2:Day 1 | **Percentage decrease**<http://studymaths.co.uk/workout.php?workoutID=84> **Ratio**<http://studymaths.co.uk/workout.php?workoutID=75> **Percentage increase** <http://studymaths.co.uk/workout.php?workoutID=39> **Compound interest** Notes<http://studymaths.co.uk/topics/simpleAndCompoundInterest.php> **Sharing amounts in a given ratio** Notes<http://studymaths.co.uk/keytopics/ratio.html>  |
| DYDD 3:Day 3 | **Percentage increase** (same as DYDD 2)<http://studymaths.co.uk/workout.php?workoutID=39> **Ratio of an amount**<http://studymaths.co.uk/workout.php?workoutID=116> **Rounding** (minimum value)Decimal places<http://studymaths.co.uk/workout.php?workoutID=61>Significant figures<http://studymaths.co.uk/workout.php?workoutID=62>**Fraction of an amount**Notes<http://studymaths.co.uk/keytopics/fractionsofamounts.html> Worksheet<http://studymaths.co.uk/workout.php?workoutID=22> **Percentage of an amount**<http://studymaths.co.uk/workout.php?workoutID=38>  |
| DYDD 4:Day 4 | **Pythagoras’ Theorem**Notes <http://studymaths.co.uk/keytopics/pythagoras.html> Worksheet<http://studymaths.co.uk/workout.php?workoutID=16> **Area of a circle**Notes<http://studymaths.co.uk/keytopics/circles.html> Worksheets<http://studymaths.co.uk/workout.php?workoutID=45>  |
| DYDD 5:Day 5 | **Area of a triangle**<http://studymaths.co.uk/workout.php?workoutID=66> **Volume of a prism** Notes <http://studymaths.co.uk/keytopics/volumeofprisms.html> **Volume of a cylinder**<http://studymaths.co.uk/workout.php?workoutID=69>  |
| DYDD 6:Day 6 |

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| **Solving equations**Notes<http://studymaths.co.uk/keytopics/equations.html> Worksheets[Solving equations with brackets](http://studymaths.co.uk/workout.php?workoutID=15) |
| [Solving equations with brackets and unknowns on both sides](http://studymaths.co.uk/workout.php?workoutID=127) |
| [Solving equations with unknowns on both sides](http://studymaths.co.uk/workout.php?workoutID=31)  |
| [Solving one-step equations](http://studymaths.co.uk/workout.php?workoutID=13) |
| [Solving two-step equations](http://studymaths.co.uk/workout.php?workoutID=14) |

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| DYDD 7:Day 7 | **Simplify**<http://studymaths.co.uk/workout.php?workoutID=126> **Expand**[Expanding single brackets](http://studymaths.co.uk/workout.php?workoutID=71)[Expanding and simplifying brackets](http://studymaths.co.uk/workout.php?workoutID=121)[Expanding quadratic expressions](http://studymaths.co.uk/workout.php?workoutID=44)**Factorise** [Factorising linear expressions](http://studymaths.co.uk/workout.php?workoutID=72)**Laws of indices**[Laws of indices](http://studymaths.co.uk/workout.php?workoutID=77) |
| DYDD 8:Day 8 | **Probability**[Theoretical probability](http://studymaths.co.uk/workout.php?workoutID=132)**Estimated probability**[Expected frequency](http://studymaths.co.uk/workout.php?workoutID=55) |
| DYDD 9:Day 9 | **Sequences**Notes<http://studymaths.co.uk/keytopics/nthterm.html> Worksheets[Finding the next term of a sequence](http://studymaths.co.uk/workout.php?workoutID=112)[Finding the nth term rule](http://studymaths.co.uk/workout.php?workoutID=20)[Generating terms using the nth term rule](http://studymaths.co.uk/workout.php?workoutID=32) |
| DYDD 10:Day 10 | **Scatter diagrams****Cumulative frequency**  |