



Asesiad Athro

Cyfnodau Allweddol 2 a 3

Mathemateg : proffil dysgwr

Level 6

Rhagarweiniad

Bwriad y proffil hwn yw cynorthwyo athrawon o ran y mathau o dystiolaeth y gallan nhw eu cymryd i gyfarfod clwstwr er mwyn cefnogi'r canfyddiadau cyd-fynd orau a wnaethpwyd. Mae'r proffil hefyd yn dangos bod y dystiolaeth i'w chanfod yn bennaf yn llyfr y disgybl, ac felly eisoes ar gael i'r athrawon.

Mae'r proffil hefyd yn cynnwys sylwebaeth fanwl sy'n cynnig eglurhad clir o ran pam y cafodd y lefel cyd-fynd orau ei phennu. Does dim awgrym na disgwyliad bod angen cynhyrchu proffil ar gyfer pob disgybl yn y cohort nac ychwaith yr angen i athrawon ysgrifennu sylwebaeth mor gynhwysfawr.

Gwaith Dosbarth

6/9/13

Amcan y wers(i) = Darganfod premdr
Amthwyliath o Siapau
I ddarganfod ~~am~~ arwynebedd
Amthwyliath o Siapau

TASg: Esboniwrch mewn geir

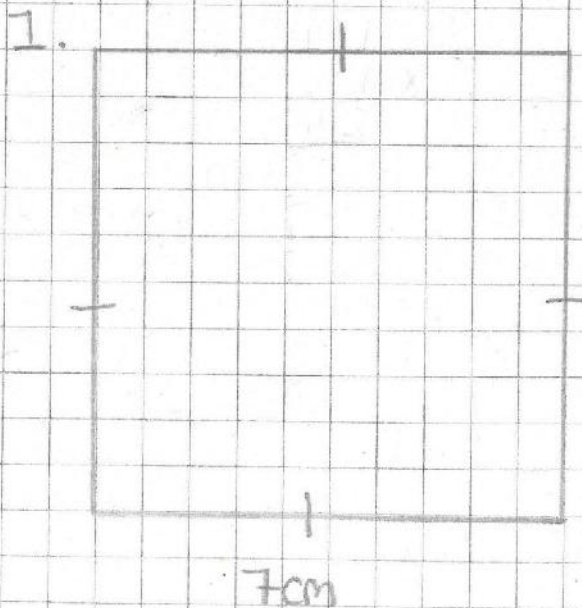
Perimedri: Pellter o gw
~~am~~ Cm.

arwynebedd: maint tu fewn
cm².

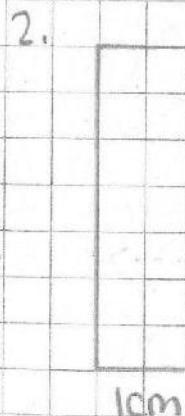
Lefel 6

"Defnyddio fformiwla i
ddarganfod arwynebedd ffigurau
unionlin plân"

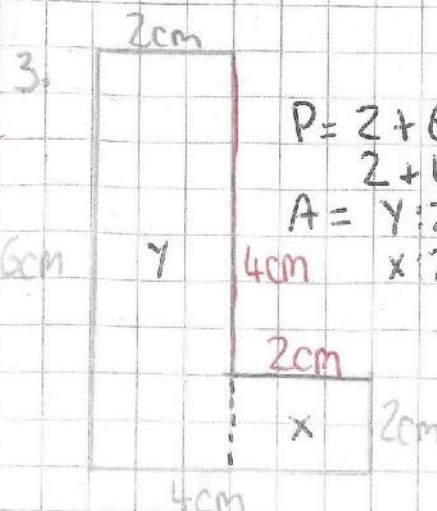
Enghreifftiau: Darganfyddwch y perimedr a'r arwynebedd



$$P = 7 + 7 + 7 + 7 = 28\text{cm}$$
$$A = 7 \times 7 = 49\text{cm}^2$$

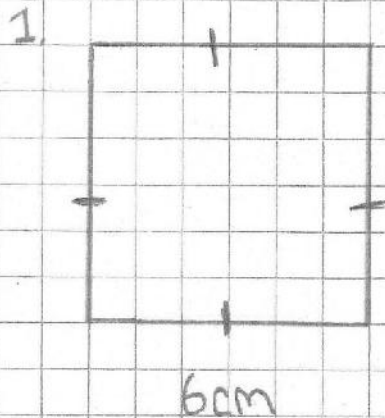


$$P = 5 + 5 + 1 + 1 = 12\text{cm}$$
$$A = 5 \times 1 = 5\text{cm}^2$$



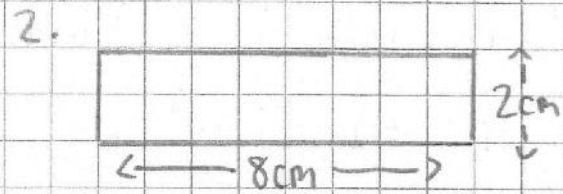
$$P = 2 + 6 + 4 + 2 + 2 + 4 = 20\text{cm}$$
$$A = 4 \times 6 = 24\text{cm}^2$$
$$+ 2 \times 2 = 4\text{cm}^2$$
$$= 28\text{cm}^2$$

Ymarfer : Darganfyddwch y perimedr a'r arwynebedd



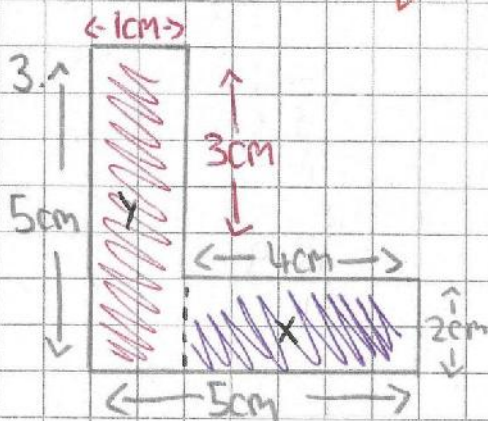
$$P: 6 + 6 + 6 + 6 = 24\text{cm}$$

$$A: 6 \times 6 = 36\text{cm}^2$$



$$P: 8 + 8 + 2 + 2 = 20\text{cm}$$

$$A: 8 \times 2 = 16\text{cm}^2$$

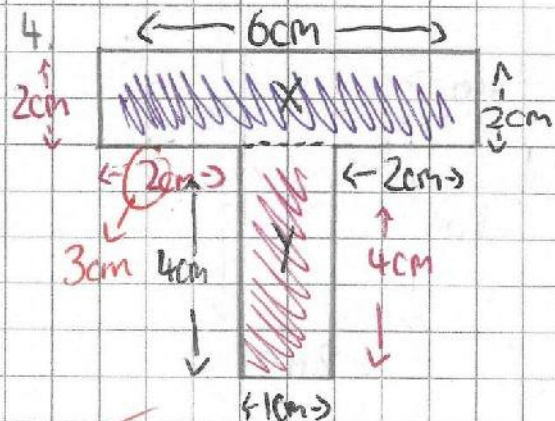


$$P: 5 + 5 + 2 + 4 + 3 + 1 = 20\text{cm}$$

$$A: Y: 5 \times 1 = 5\text{cm}^2$$

$$X: 4 \times 2 = 8\text{cm}^2$$

$$13\text{cm}^2$$



$$P: 6 + 2 + 4 + 1 + 4 + 2 + 2 + 2 = 24\text{cm}$$

$$A: X: 6 \times 2 = 12\text{cm}^2$$

$$Y: 4 \times 1 = 4\text{cm}^2$$

$$16\text{cm}^2$$

m EShyniad

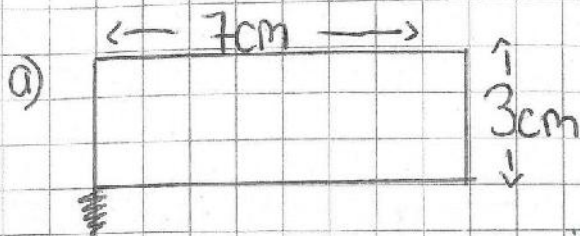


$$P: 5 + 3 + 4 = 12\text{cm}$$

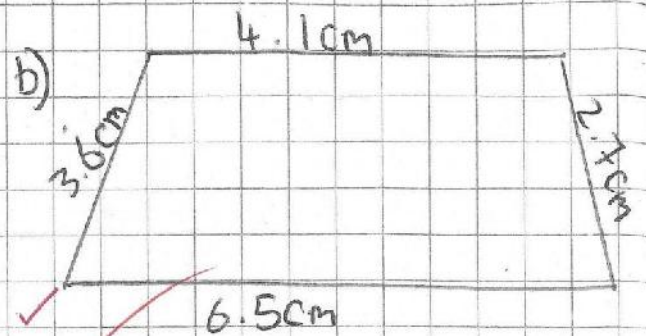
$$A: 3 \times 4 \div 2 = 6\text{cm}^2$$

Da iawn

✓
Darganfyddwch y perimedr

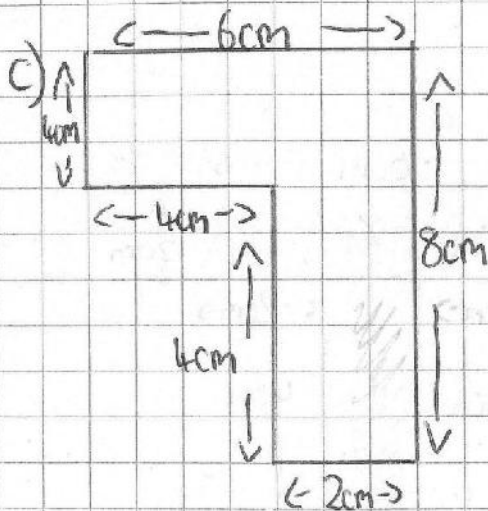


$$P: 7 + 7 + 3 + 3 = 20\text{cm} \quad \checkmark$$

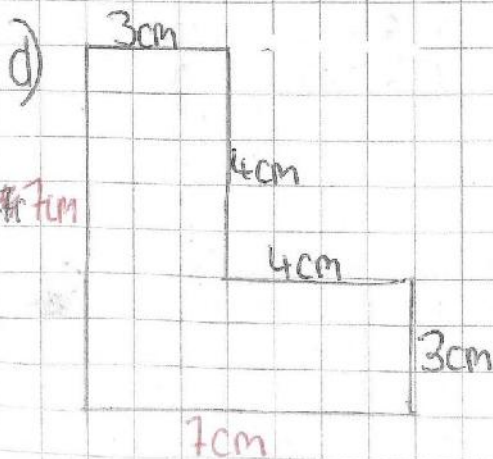


$$P: 4.1 + 3.6 + 6.5 + 2.7 = 16.9\text{cm} \quad \checkmark$$

4.1
3.6
6.5
2.7
16.9
1

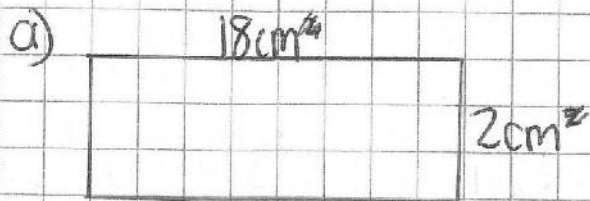


$$P: 6 + 8 + 2 + 4 + 4 + 4 = 28\text{cm} \quad \checkmark$$

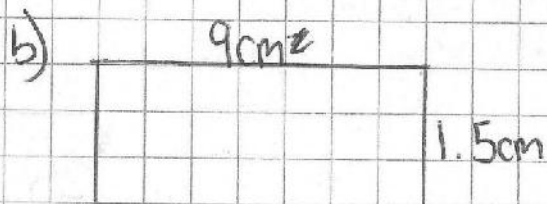


$$P: 7 + 7 + 3 + 3 + 4 + 4 = 28\text{cm} \quad \checkmark$$

2/ Darganfyddwch arwynebedd y canlynol:



$$A: 18 \times 2 = 36\text{cm}^2 \checkmark$$

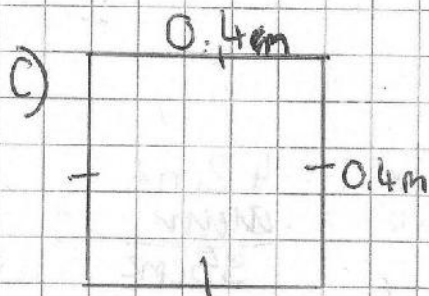


$$A: 9 \times 1.5 = 13.5\text{cm}^2 \checkmark$$

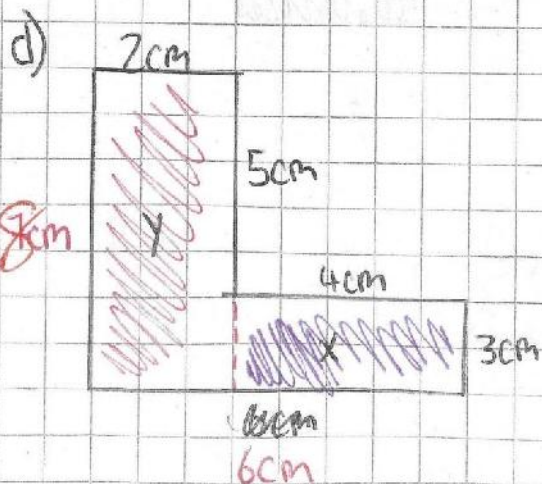
$$9 \times 1 = 9$$

$$9 \times 0.5 = 4.5 +$$

$$9 + 4.5 = 13.5\text{cm}^2 \checkmark$$



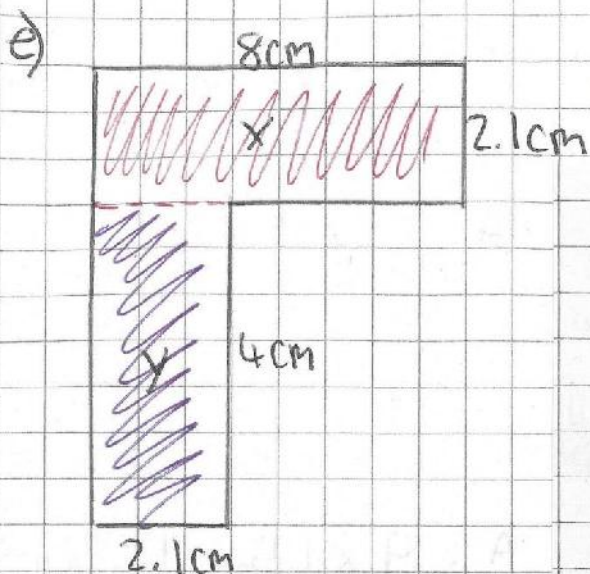
$$A: 0.4 \times 0.4 = 0.16\text{m}^2 \checkmark$$



$$A: y: 2 \times 5 = 10\text{cm}^2 \checkmark$$

$$x: 4 \times 3 = 12\text{cm}^2 \checkmark$$

$$22\text{cm}^2 \checkmark$$



A: $X: 8 \times 2.1 = 16.8$ ✓

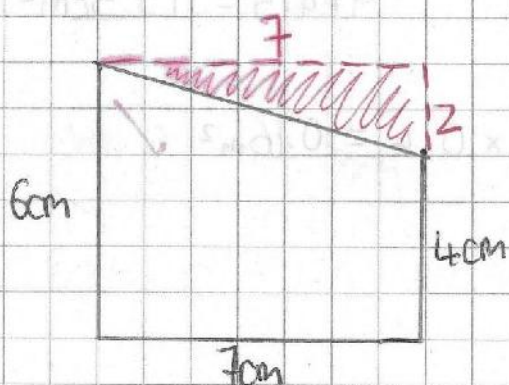
$Y: 4 \times 2.1 = 8.4$ ✓

$X \rightarrow 4 \times 2 = 8$
 $4 \times 0.1 = 0.4$

$X \rightarrow 8 \times 2 = 16$
 $8 \times 0.1 = 0.8$

25.2 cm^2 ✓

Estyniad



A: $6 \times 7 = 42 \text{ cm}^2$ ✓

$7 \times 2 \div 2 = 7$ ✓

$42 - 7 = 35 \text{ cm}^2$ ✓

Gwaith Dosbarth

405

13/9/13

Cwrs Cynllaf:

$9 \times 40 = 360$

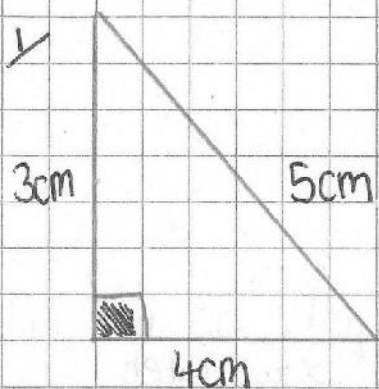
$9 \times 5 = 45$
 405

29,60,000			
7200	4050		
80	90	45	
8	10	9	5

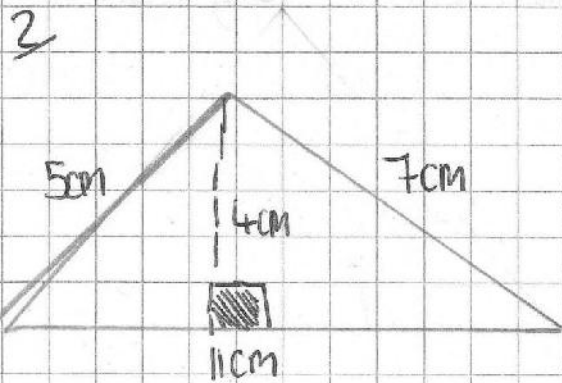
72×9100
 9100
 72×9100
 72×9100

	$\times 400$	5
70	28000	350
2	800	10

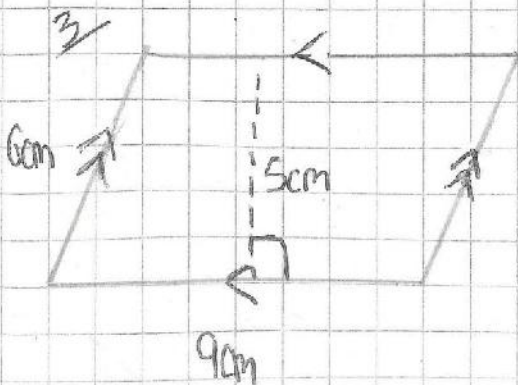
Nod y wels : Darganfodd arwynebedd amrywiol o Siapau.



$$A: 3 \times 4 \div 2 = 6\text{cm}^2$$

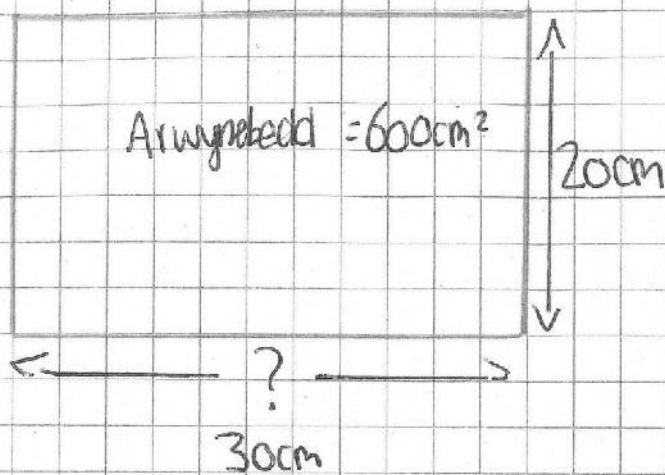


$$A: 11 \times 4 \div 2 = 22\text{cm}^2$$



$$A: 9 \times 5 = 45\text{cm}^2$$

Estyniad



$$20 \times ? = 600$$

$$\div ? = \frac{600}{20} = \frac{60}{2}$$

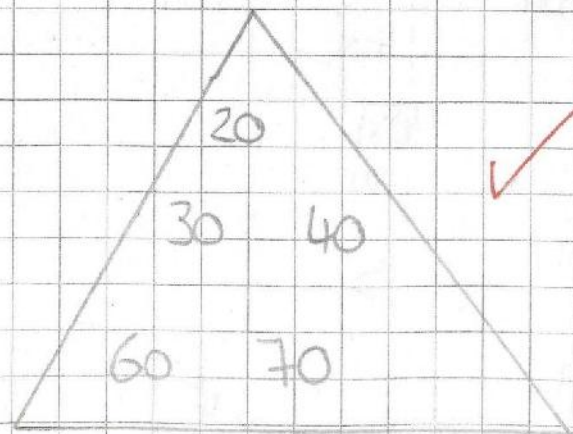
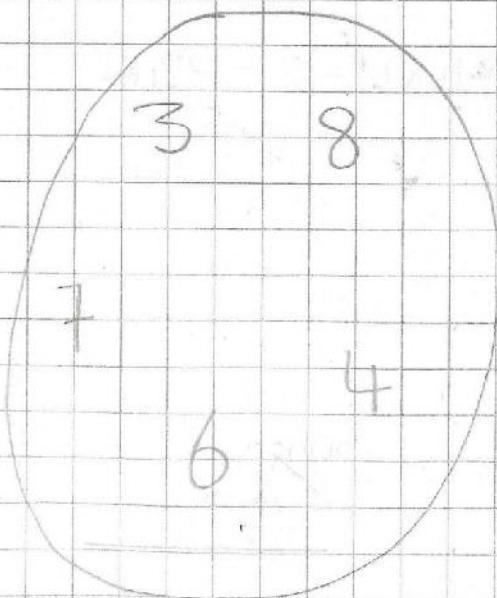
$$? = 30\text{cm}$$

✓ Da iawn

Gwaith Dosbarth

16/9/13

Cwrs Cyntaf: Dewisiwch un ^{rhif} o'r cylch ac un rhif
o'r triagl a lluoswch. Sawl o leib
gwahanol gallwch chi ei ddarganfydd?



$3 \times 20 = 60$ ✓	$3 \times 60 = 180$ ✓	$4 \times 30 = 120$ ✓
$3 \times 30 = 90$ ✓	$3 \times 70 = 210$ ✓	$4 \times 40 = 160$ ✓
$3 \times 40 = 120$ ✓	$4 \times 20 = 80$ ✓	$4 \times 60 = 240$ ✓

$$4 \times 70 = 280 \checkmark \quad 6 \times 40 = 240 \checkmark$$

$$6 \times 20 = 120 \checkmark \quad 6 \times 60 = 360 \checkmark$$

$$6 \times 30 = 180 \checkmark \quad 6 \times 70 = 420 \checkmark$$

$$7 \times 60 = 420 \checkmark$$

$$7 \times 70 = 490 \checkmark$$

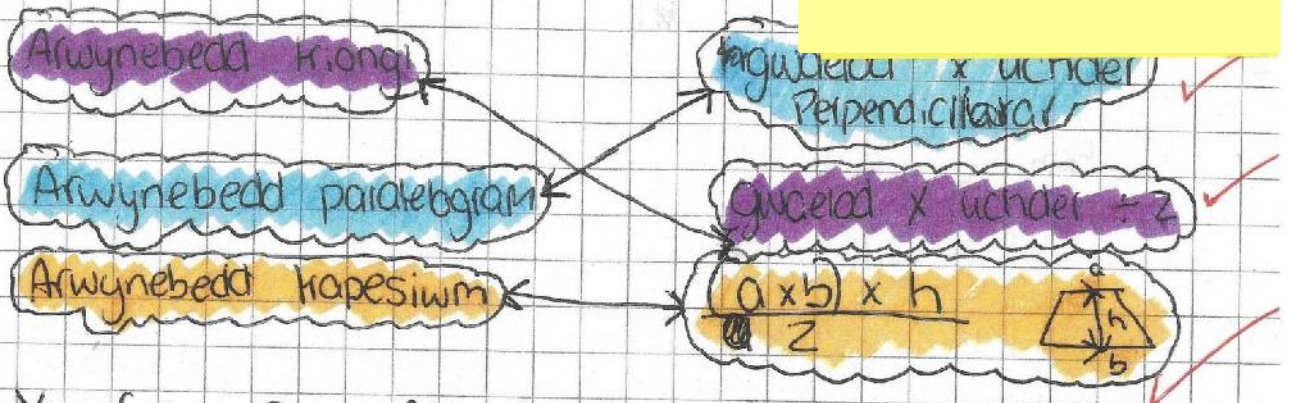
$$8 \times 20 = 160 \checkmark$$

$$\frac{21}{25}$$

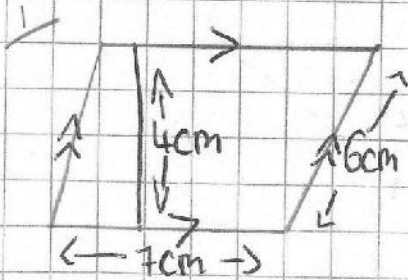
Lefel 6

"Defnyddio fformiwlaŷ i ddarganfod arwynebedd ffigurau unionlin plân"

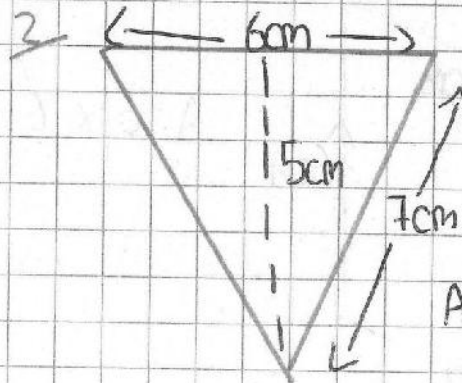
Porwch:



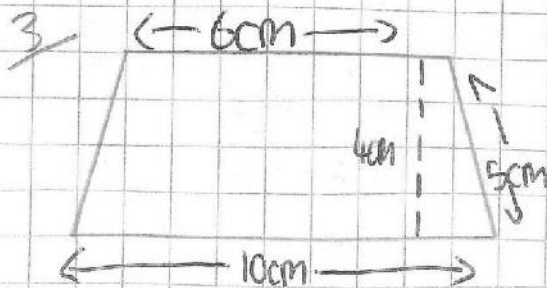
Ymarfer : Darganfyddwch Arwynebedd y Canlynol.



$$A = 4 \times 7 = 28 \text{ cm}^2 \checkmark$$



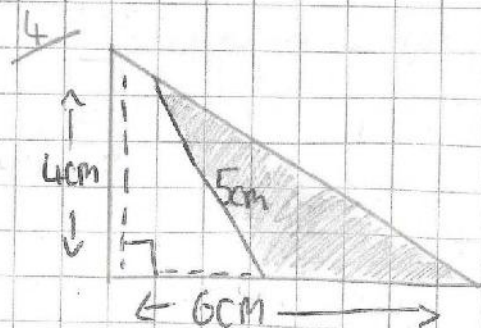
$$A = 6 \times 5 \div 2 = 15 \text{ cm}^2 \checkmark$$



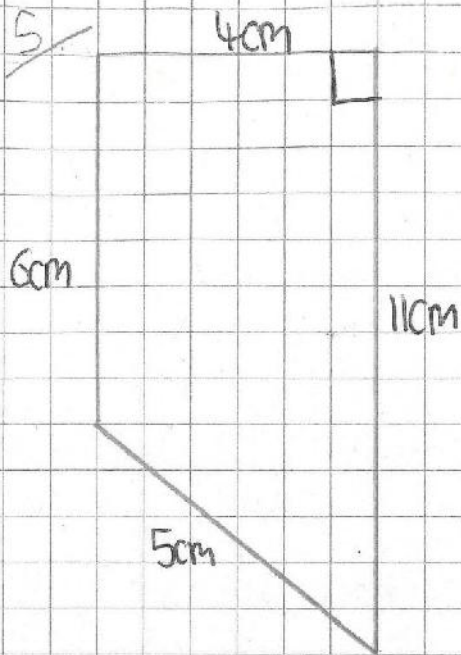
$$10 + 6 = 16$$

$$16 \times 4 = 64 \text{ cm}^2$$

$$16 \times 4 \div 2 = 32 \text{ cm}^2 \checkmark$$



$$A = 6 \times 4 \div 2 = 12 \text{ cm}^2 \checkmark$$



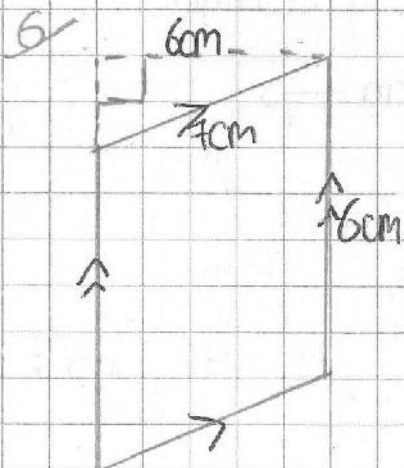
$$A = 11 \times 4 = 44$$

$$11 \times 4 \div 2 = 22 \text{ cm}^2 \quad \text{X}$$

$$= 34 \text{ cm}^2$$

$$11 + 6 = 17 \times 4 \div 2$$

Cofia bod
3cm.



$$A: 6 \times 6 = 36 \text{ cm}^2$$

Beth am yr estymiad?



$$\text{petryal} = 12 \times 5 = 60 \text{ cm}^2$$

$$\text{triangl} = 5 \times 4 \div 2 = 10 \text{ cm}^2$$

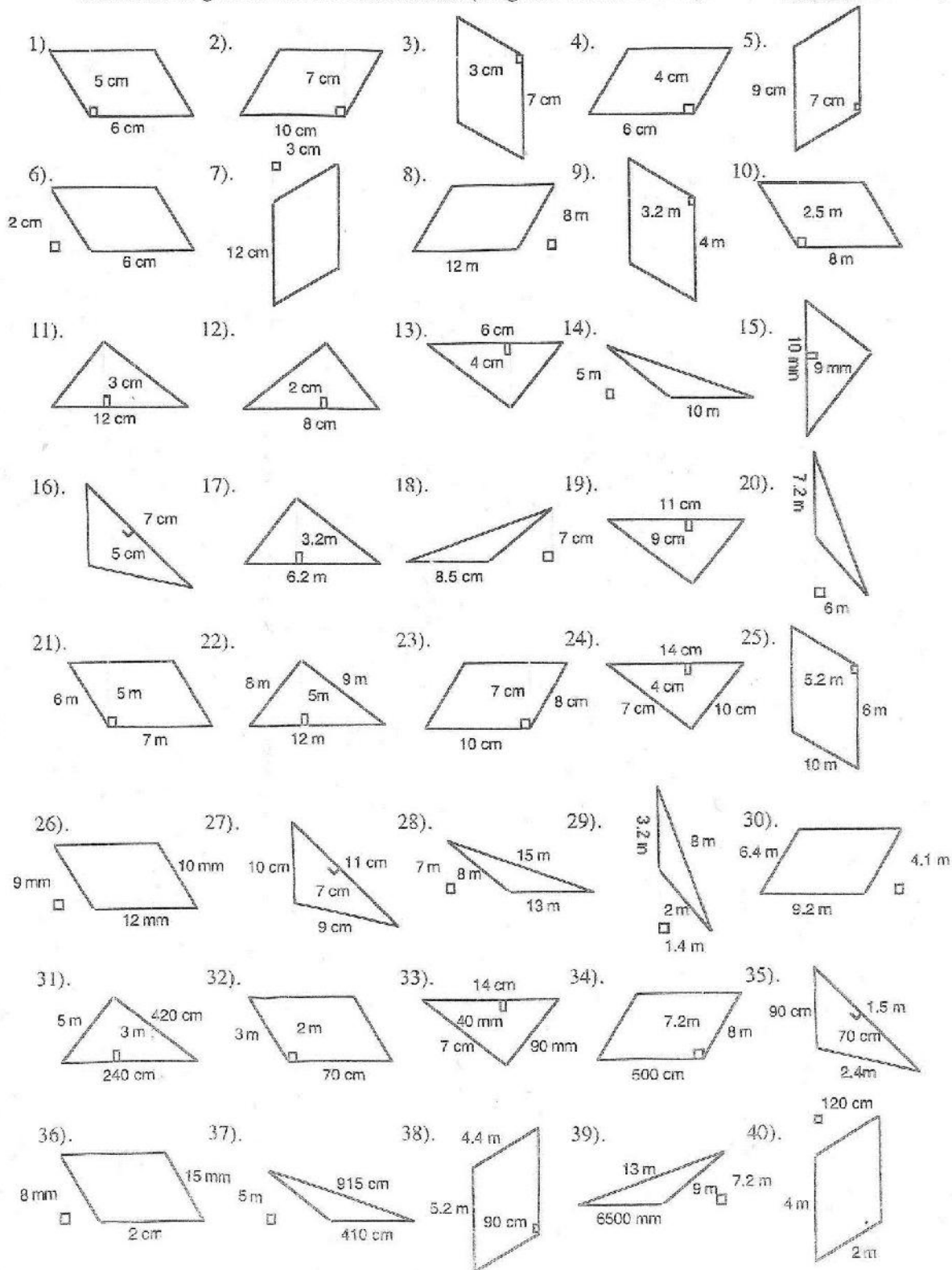
$$\text{Tynwyl} = \underline{50 \text{ cm}^2}$$



Parallelograms and Triangles.



Find the area of the following parallelograms and triangles.
Remember to give the units for each answer. (Diagrams are not to scale).



Paralelograms a Hionglou

- ① $A = 6 \times 5 = 30 \text{ cm}^2$ ✓
- ② $A = 7 \times 10 = 70 \text{ cm}^2$ ✓
- ③ $A = 3 \times 7 = 21 \text{ cm}^2$ ✓
- ④ $A = 4 \times 6 = 24 \text{ cm}^2$ ✓
- ⑤ $A = 9 \times 7 = 63 \text{ cm}^2$ ✓
- ⑥ $A = 2 \times 6 = 12 \text{ cm}^2$ ✓
- ⑦ $A = 3 \times 12 = 36 \text{ cm}^2$ ✓
- ⑧ $A = 8 \times 12 = 96 \text{ cm}^2$ ✓
- ⑨ $A = 3.2 \times 4 = 12.8 \text{ cm}^2$ ✓
- ⑩ $A = 2.5 \times 8 = 20 \text{ cm}^2$ ✓
- ⑪ $A = 3 \times 12 \div 2 = 18 \text{ cm}^2$ ✓
- ⑫ $A = 2 \times 8 \div 2 = 8 \text{ cm}^2$ ✓
- ⑬ $A = 6 \times 4 \div 2 = 12 \text{ cm}^2$ ✓
- ⑭ $A = 5 \times 10 \div 2 = 25 \text{ cm}^2$ ✓
- ⑮ $A = 9 \times 10 \div 2 = 45 \text{ cm}^2$ ✓
- ⑯ $A = 5 \times 7 \div 2 = 17.5 \text{ cm}^2$ ✓
- ⑰ $A = 3.2 \times 6.2 \div 2 = 9.92 \text{ cm}^2$ ✓
- ⑱ $A = 7 \times 8.5 \div 2 = 29.75 \text{ cm}^2$ ✓
- ⑲ $A = 9 \times 11 \div 2 = 49.5 \text{ cm}^2$ ✓
- ⑳ $A = 7.2 \times 6 \div 2 = 21.6 \text{ cm}^2$ ✓
- ㉑ $A = 5 \times 7 = 35 \text{ cm}^2$ ✓

- 23 $A = 10 \times 7 = 70 \text{ cm}^2$ ✓
 24 $A = 14 \times 4 \div 2 = 28 \text{ cm}^2$ ✓
 25 $A = 5.2 \times 10 = 52 \text{ m}^2$ x
 26 $A = 12 \times 9 = 108 \text{ cm}^2$ ✓
 27 $A = 9 \times 10 \div 2 = 45 \text{ cm}^2$ x
 28 $A = 7 \times 13 \div 2 = 45.5 \text{ m}^2$ ✓
 29 $A = 3.2 \times 1.4 \div 2 = 2.24 \text{ m}^2$ ✓
 30 $A = 4.1 \times 9.2 = 37.72 \text{ m}^2$ ✓
 31 $A = 240 \times 300 \div 2 = 36000 \text{ cm}^2$ ✓
 32 $A = 70 \times 20 = 1400 \text{ cm}^2$ ✓
 33 $A = 14 \times 4 \div 2 = 28 \text{ cm}^2$ ✓
 34 $A = 720 \times 500 = 360000 \text{ cm}^2$ ✓
 35 $A = 240 \times 90 = 21600 \text{ cm}^2$ x
 36 $A = 2 \times 0.8 = 1.6 \text{ cm}^2$ ✓
 37

100%

Ardderchog!

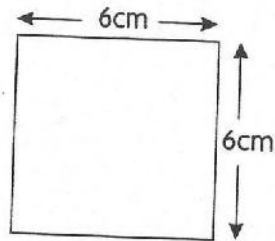
GWAITH CARTREF / Homework



1) Beth yw perimedr y sgwâr a'r triongl hafalochrog?

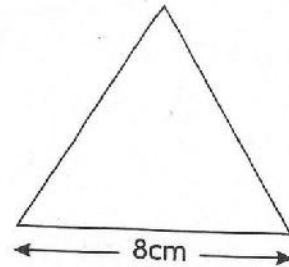
Find the perimeter of the square and equilateral triangle.

a)



24 cm

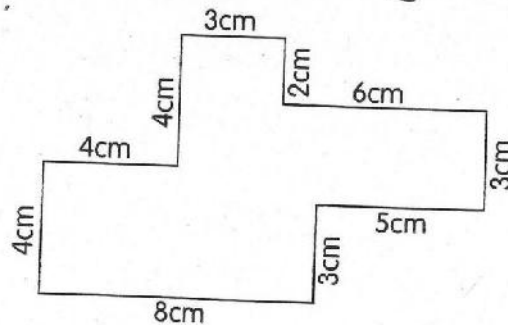
b)



24 cm

2) Mae Delyth wedi torri allan darn o bapur â siswrn. Beth yw perimedr y siâp?

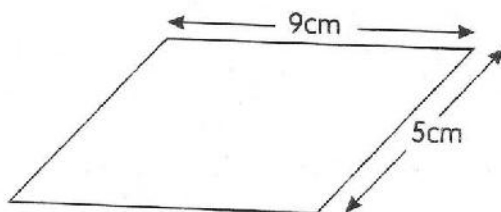
Delyth has cut out the following shape. Find it's perimeter.



42cm

3) Beth yw perimedr y paralelogram?

Find the perimeter of the parallelogram.

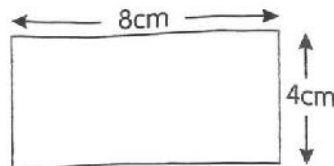


6

28cm



- 1) Beth yw arwynebedd y petryal hwn? What is the area of the rectangle?



32 ✓ cm²

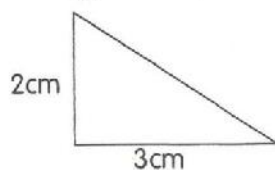
- 2) a) Ysgrifennwch y fformiwla ar gyfer arwynebedd triongl.

Write the formulae for the area of a triangle.

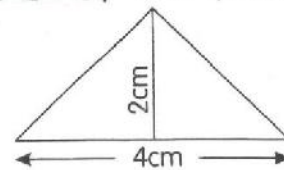
Area of triangle / Arwynebedd triongl = $\frac{\text{hyd} \times \text{llosgi}}{2}$ lled a rhannu gyda dau

- b) Defnyddiwch eich fformiwla i gyfrifo arwynebedd y trionglau canlynol.

Use your formulae to find the area of the following triangle



i) 3 ✓ cm²

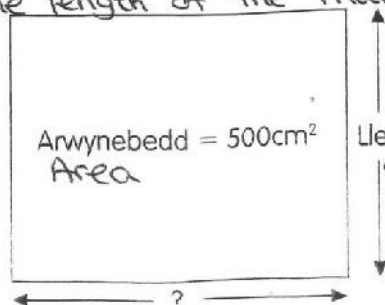


ii) 4 ✓ cm²

9

- 3) Arwynebedd mat llygoden petryal yw 500cm², mae lled y mat wedi'i ddangos isod. Cyfrifwch hyd y mat.

The area of a mat is 500cm². The width is shown below. Find the length of the mat.



Lled = 20cm

width = 20cm

$$20 \times ? = 500$$

$$\div ? = \frac{500}{20} = \frac{50}{2}$$

$$? = 25$$

$$25$$

cm



~~Maths~~ Gwaith Dosbarth

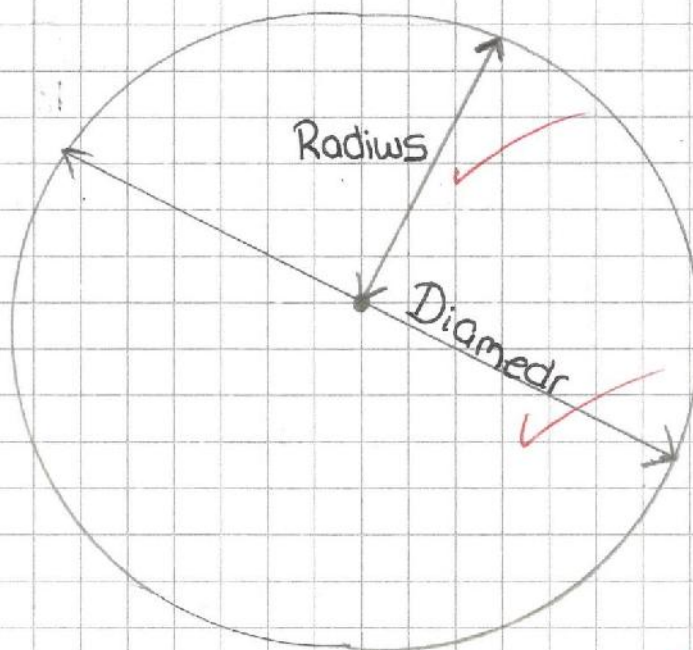
Lefel 6

"Defnyddio fformiwlaau i ddarganfod cylchedd ac arwynebedd cylchoedd"

Cwrs Cyntaf:

3330 → 1665 → 1666 → 833 → 834 → 417 → 418 → 209 →
~~208~~ → 105 → ~~104~~ → ~~103~~ → 52 → 26 → 28 → ~~14~~ → ~~7~~ → ~~8~~ → ~~4~~
 210 → 106 → 53 14 → 7 → 8 → 4 →
 2 → 1

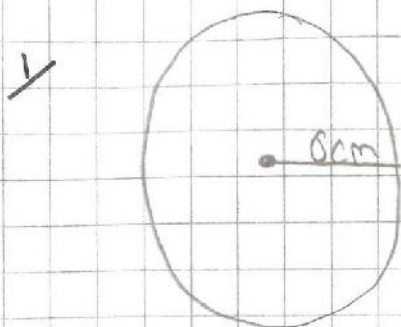
Nod y wers: Darganfod perimedr ac arwynebedd Cylch.



Arwynebedd Cylch: $\pi \times R \times R$ $\pi \times R = \text{Radiws}$
 (3.14)

Perimedr Cylch: $\pi \times D$ $D = \text{Diamedr}$
 (3.14)

Enggräfft

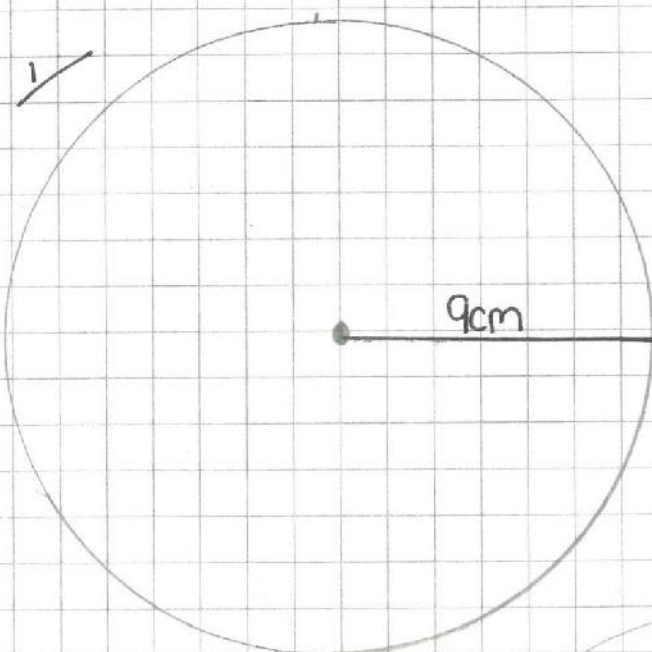


$$\text{Areaynebedd} = 3.14 \times 6 \times 6 = 113.1 \text{ cm}^2$$

$$\text{Perimetr} = 3.14 \times 12 = 37.68$$

add 1
37.7cm ✓

Ymäter



$$P = 3.14 \times 18 = 56.52 \text{ cm} \checkmark$$

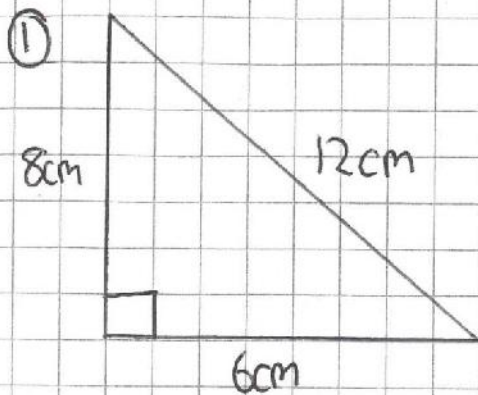
$$A = 3.14 \times 9 \times 9 = 254.5 \text{ cm}^2 \checkmark$$

$$P = 3.14 \times 20 = 62.8 \text{ cm} \checkmark$$

$$A = 3.14 \times 10 \times 10 = 314.2 \text{ cm}^2 \checkmark$$

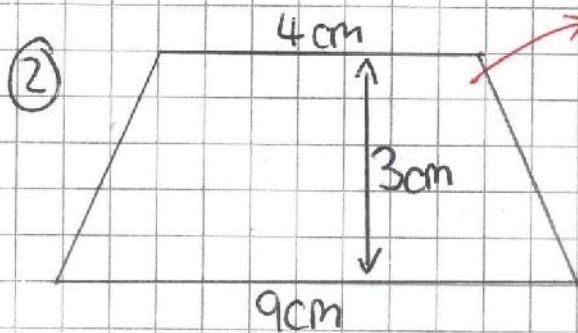


Cwrs Cymdf: Darganfyddwch yr Arwynebedd y Canlynol:



$$A: 8 \times 6 = 48\text{cm}$$

$$8 \times 6 \div 2 = 24\text{cm}^2 \checkmark$$

trapezium yw hwn $\rightarrow$ angen 3cm

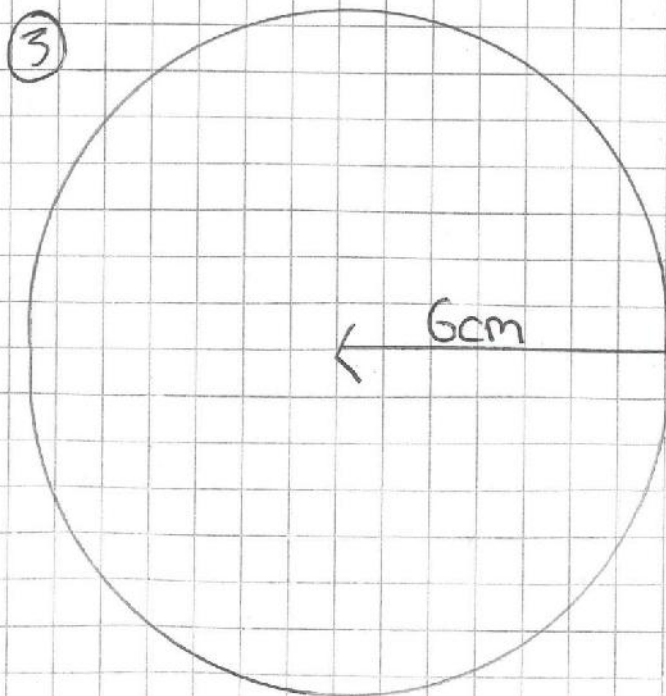
$$A: 9 \times 3 = 27\text{cm}^2 \text{ X}$$

$$4 \times 9 = 36$$

$$36 \div 2 = 18$$

$$18 \times 3 = 54$$

$$54 \div 2 = 27$$



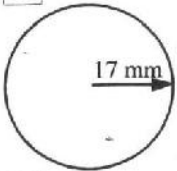
$$A: 3.14 \times 6 \times 6 = 113.04\text{cm}^2$$

Arwynebedd a perimedr cylch.

Area and perimeter of a circle.

1) Cyfrifwch arwynebedd a perimedr y cylchoedd canlynol:
Find the area and perimeter of the following circles:

1



$$3.14 \times 17 \times 17 = 907.9 \text{ mm}^2$$

$$3.14 \times 34 = 106.8 \text{ mm}$$

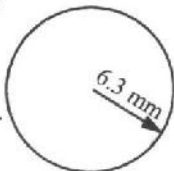
2



$$3.14 \times 22.6 \times 22.6 = 1604.6 \text{ m}^2$$

$$3.14 \times 45.2 = 142 \text{ m}$$

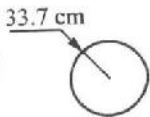
3



$$3.14 \times 6.3 \times 6.3 = 124.7 \text{ mm}^2$$

$$3.14 \times 12.6 = 39.6 \text{ mm}$$

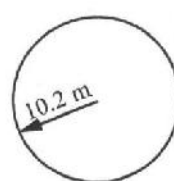
4



$$3.14 \times 33.7 \times 33.7 = 3567.9 \text{ cm}^2$$

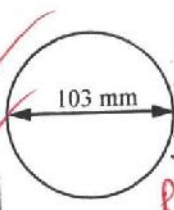
$$3.14 \times 67.4 = 211.7 \text{ cm}$$

5



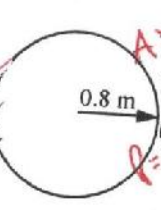
$$326.9 \text{ m}^2$$

$$64.1 \text{ m}$$



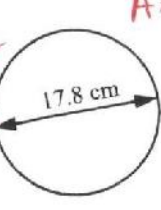
$$A = 8332.3 \text{ mm}^2$$

$$P = 323.6 \text{ mm}$$



$$A = 2.0 \text{ m}^2$$

$$P = 5.0 \text{ m}$$

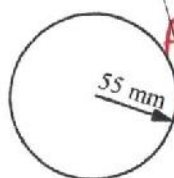


$$A = 248.8 \text{ cm}^2$$

$$P = 99.5 \text{ cm}$$

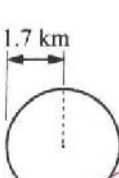
$$P = 55.9$$

9)



$$A = 9503.3 \text{ mm}^2$$

$$P = 345.6 \text{ mm}$$



$$A = 9.1 \text{ km}^2$$

$$P = 10.7 \text{ km}$$

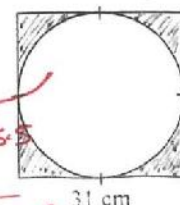
Estyniad / Extension

Find the shaded area:
Darganfyddwch yr arwynebedd tywyll:

$$\text{Square} = 31 \times 31 = 961$$

$$\text{cylch} = \pi \times 15.5 \times 15.5 = 754.8$$

$$\text{Tywyll} = 206.2 \text{ cm}^2$$



Fruit pies

Anna is making fruit pies.

She has a rectangular sheet of pastry that is 60cm by 30cm.



Each pie needs two pastry circles,
one of diameter 10cm, one of diameter 6cm.



Anna will use the leftover pastry to roll a smaller rectangle,
but she will only use the leftover pastry in this way once.

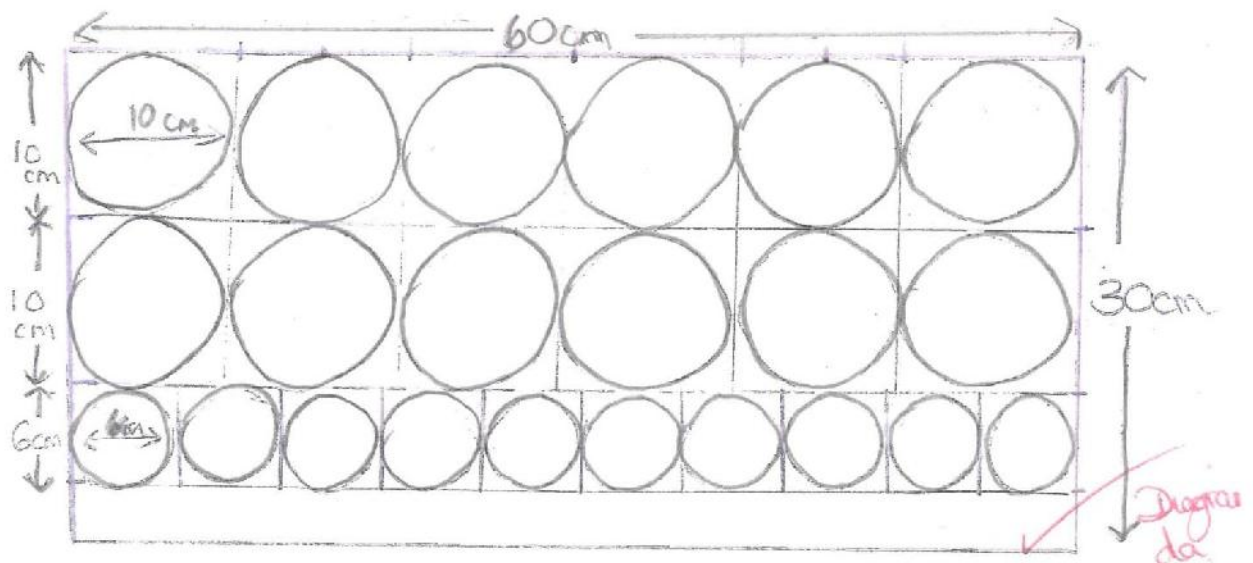


What is the largest number of fruit pies Anna can make?



Ymchwiliad mins peis.

TASG 4



yn y petryal cyntaf mae yna 12 cylch mawr a 10 cylch bach.

$$\begin{aligned} \text{Arwynebedd 1 cylch mawr (radius = 5cm)} &= \pi \times 5^2 \\ &= 78.539816 \\ &= 78.5 \text{ cm}^2 \end{aligned}$$

$$\text{Arwynebedd 12 cylch mawr} = 12 \times 78.5 = 942.5 \text{ cm}^2$$

$$\text{Arwynebedd 1 cylch bach (radius = 3cm)} = \pi \times 3^2 = 28.2743$$

$$\begin{aligned} \text{Arwynebedd 10 cylch bach} &= 10 \times 28.3 = 283.7 \text{ cm}^2 \end{aligned}$$

Ond bydd peth toes dros ben

$$\begin{aligned} \text{Arwynebedd} &= (60 \times 30) - 942.5 - 283.7 \\ &= 574.8 \text{ cm}^2 \end{aligned}$$

Gy'ail waith mae angen 2 gylch bach ($2 \times 28.3 = 56.6 \text{ cm}^2$)

$$\text{Arwynebedd ar ôl} = 574.8 - 56.6 = 518.2 \text{ cm}^2$$

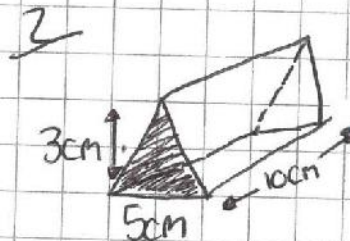
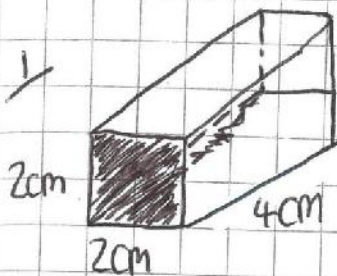
$$\text{Mae 1 cylch mawr a 1 bach} = 78.5 + 28.3 = 106.8 \text{ cm}^2$$

$$\text{Felly} = 518.2 \div 106.8 = 4.8 \sim \text{felly 4 arall at yr}$$

30.9.13

Nod y weis : Cyfrifo Cyfaint

Darganfyddwrh Cyfeint y Canlynol:

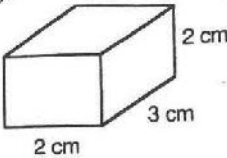
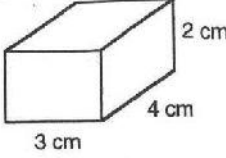
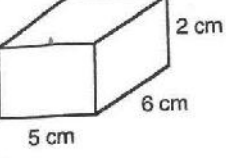
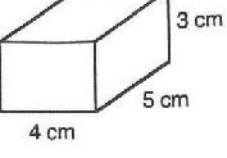
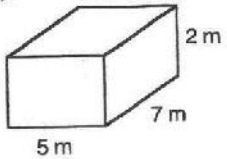
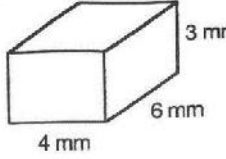
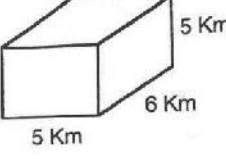
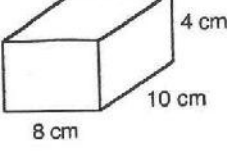


Cyfaint : $2 \times 2 \times 4$
 $= 4 \times 4 =$
 $= 16\text{cm}^3$

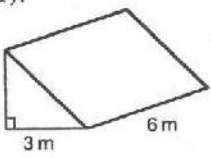
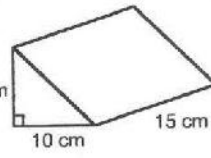
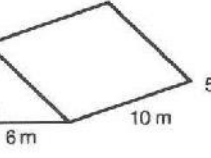
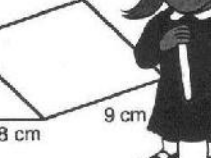
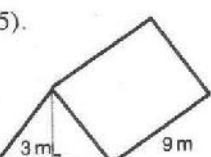
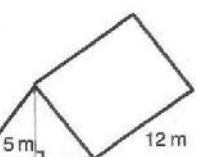
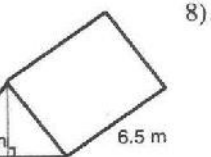
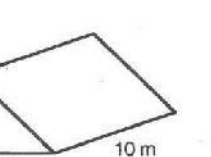
Cyfaint : $5 \times 3 \div 2 = 7.5$
 $= 7.5 \times 10 = 75\text{cm}^3$

Cyfaint / Volume

A Darganfyddwch gyfaint y canlynol:
Find the volume of the following:

- 1).  2 cm, 3 cm, 2 cm
- 2).  3 cm, 4 cm, 2 cm
- 3).  5 cm, 6 cm, 2 cm
- 4).  4 cm, 5 cm, 3 cm
- 5).  5 m, 7 m, 2 m
- 6).  4 mm, 6 mm, 3 mm
- 7).  5 Km, 6 Km, 5 Km
- 8).  8 cm, 10 cm, 4 cm

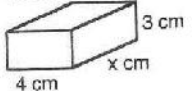
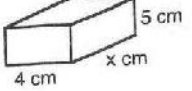
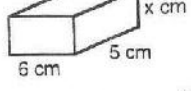
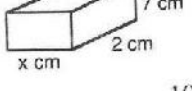
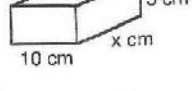
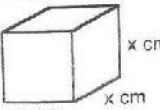
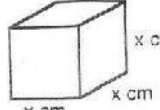
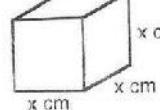
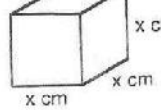
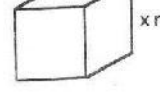
B

- 1).  4 m, 3 m, 6 m
- 2).  8 cm, 10 cm, 15 cm
- 3).  9 m, 6 m, 10 m
- 4).  5 cm, 3.8 cm, 9 cm
- 5).  3 m, 8 m, 9 m
- 6).  5 m, 7 m, 12 m
- 7).  2 m, 4.3 m, 6.5 m
- 8).  6 m, 4.2 m, 10 m



Estyniad / Extension:

Darganfyddwch hyd yr ochr x.
Find the length of the missing side x.

- 1). cyfaint =
Volume = 24 cm³
 4 cm, x cm, 3 cm
- 2).
Volume = 40 cm³
 4 cm, x cm, 5 cm
- 3).
Volume = 90 cm³
 6 cm, 5 cm, x cm
- 4).
Volume = 42 cm³
 x cm, 2 cm, 7 cm
- 5).
Volume = 200 cm³
 10 cm, x cm, 5 cm
- 6).
Volume = 8 cm³
 x cm, x cm, x cm
- 7).
Volume = 64 cm³
 x cm, x cm, x cm
- 8).
Volume = 343 cm³
 x cm, x cm, x cm
- 9).
Volume = 27 cm³
 x cm, x cm, x cm
- 10).
Volume = 125 m³
 x m, x m, x m

$$A1) 2 \times 2 \times 3 \\ 4 \times 3 = 12 \\ C: 12 \text{ cm}^3$$

$$A2) 3 \times 2 \times 4 \\ 6 \times 4 = 24 \\ C: 24 \text{ cm}^3$$

$$A3) 5 \times 2 \times 6 \\ 10 \times 6 = 60 \\ C: 60 \text{ cm}^3$$

$$A4) 4 \times 3 \times 5 \\ 12 \times 5 = 60 \\ C: 60 \text{ cm}^3$$

$$A5) 5 \times 2 \times 7 \\ 10 \times 7 = 70 \\ C: 70 \text{ cm}^3$$

$$A6) 4 \times 3 \times 6 \\ 12 \times 6 = 72 \\ C: 72 \text{ cm}^3$$

$$A7) 5 \times 5 \times 6 \\ 25 \times 6 = 150 \\ C: 150 \text{ cm}^3$$

$$A8) 8 \times 4 \times 10 \\ 32 \times 10 = 320 \\ C: 320 \text{ cm}^3$$

$$B1) 3 \times 4 \div 2 \\ 6 \times 6 = 36 \\ C: 36 \text{ m}^3$$

$$B2) 10 \times 8 \div 2 \\ 40 \times 15 = 600 \\ C: 600 \text{ cm}^3$$

$$B3) 6 \times 9 \div 2 \\ 27 \times 10 = 270 \\ C: 90 \text{ m}^3 \quad 270 \text{ m}^3$$

$$B4) 5 \times 3.8 \div 2 \\ 19 \times 9 = 171 \\ C: 85.5 \text{ cm}^3$$

$$B5) 8 \times 3 \div 2 \\ 12 \times 9 = 108 \\ C: 108 \text{ m}^3$$

$$B6) 7 \times 5 \div 2 \\ 17.5 \times 12 = 210 \\ C: 210 \text{ m}^3$$

$$B7) 4.3 \times 2 \div 2 \\ 4.3 \times 6.5 = 27.95 \\ C: 27.95 \text{ m}^3$$

$$B8) 8 \times 4.2 \div 2 \\ 16.8 \times 10 = 168 \\ C: 168 \text{ m}^3 \quad 126 \text{ m}^3$$

Lefel 6

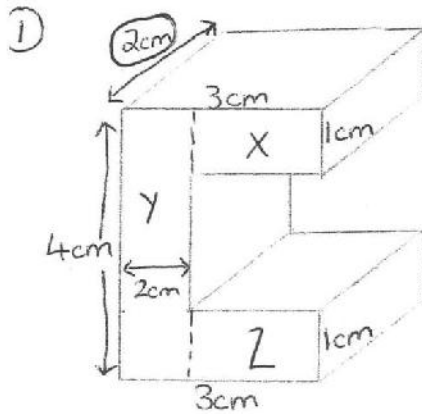
"Defnyddio fformiwlâu i ddarganfod cyfaint ciwboidau"

Cyfaint Siapau C

Lefel 7

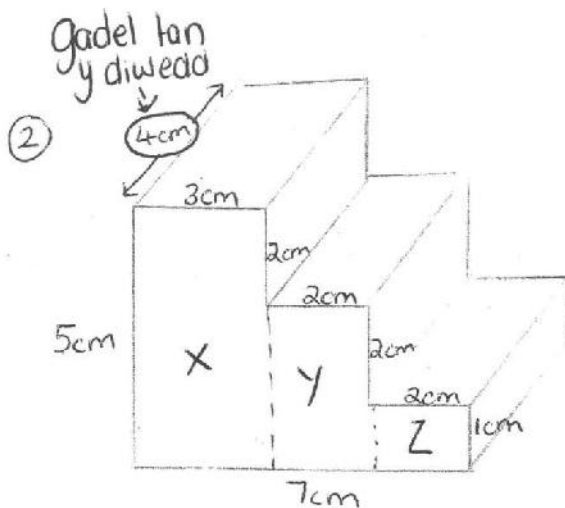
"Cyfrifo arwynebedd a chyfaint mewn prismau union"

Enghreifftiau



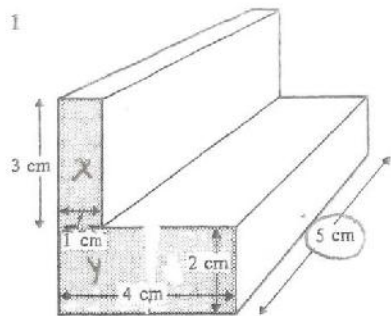
$$\begin{aligned} X &: 3 \times 1 = 3 \\ Y &: 2 \times 1 = 2 \\ Z &: 2 \times 2 = 4 \end{aligned}$$

$$C = 10 \times 2 = 20 \text{ cm}^3$$



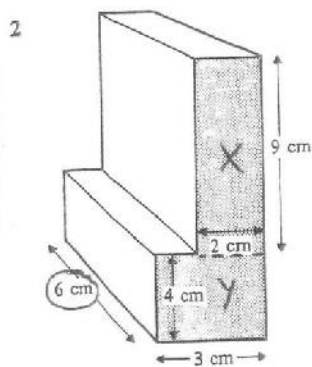
$$\begin{aligned} X &: 3 \times 5 = 15 \\ Y &: 2 \times 3 = 6 \\ Z &: 2 \times 1 = 2 \\ \hline &23 \end{aligned}$$

$$C = 23 \times 4 = 92 \text{ cm}^3$$



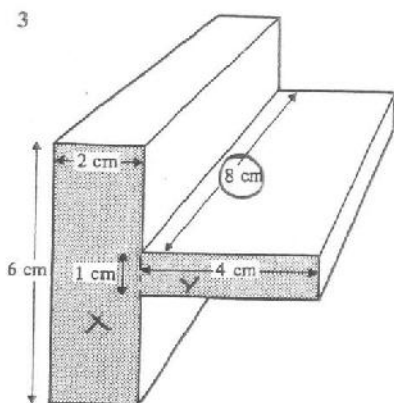
$$\begin{array}{r} X : 3 \times 1 = 3 \\ Y : 2 \times 4 = 8 \\ \hline 11 \end{array} +$$

$$C = 11 \times 5 = 55 \text{ cm}^3$$



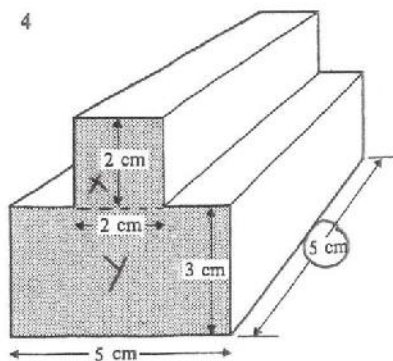
$$\begin{array}{r} X : 9 \times 2 = 18 \\ Y : 4 \times 3 = 12 \\ \hline 30 \end{array} +$$

$$C = 30 \times 6 = 180 \text{ cm}^3$$



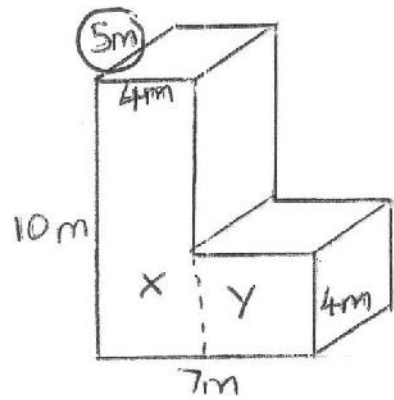
$$\begin{array}{r} X : 6 \times 2 = 12 \\ Y : 4 \times 1 = 4 \\ \hline 16 \end{array} +$$

$$C = 16 \times 8 = 128 \text{ cm}^3$$

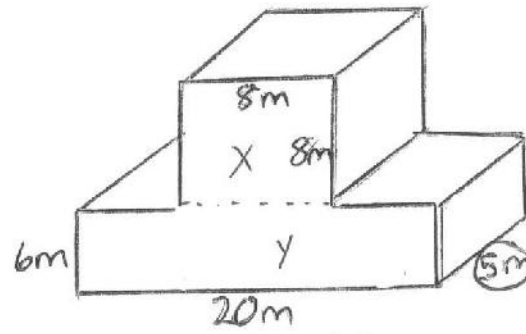


$$\begin{array}{r} X : 2 \times 2 = 4 \\ Y : 5 \times 3 = 15 \\ \hline 19 \end{array} +$$

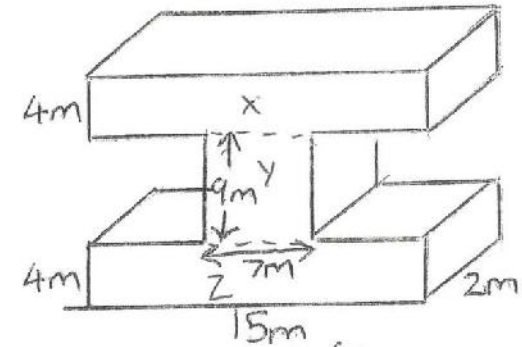
$$C = 19 \times 5 = 95 \text{ cm}^3$$



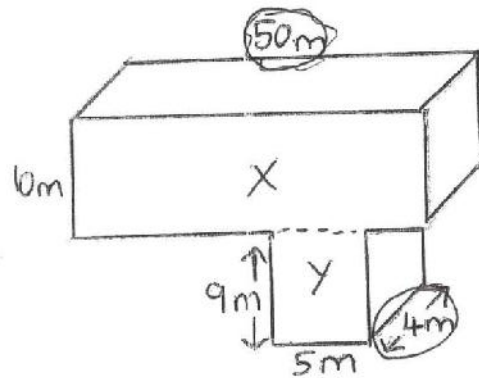
$$\begin{aligned}
 X &: 4 \times 10 = 40 \\
 Y &: 3 \times 4 = 12 + \\
 &\quad \underline{52} \\
 C &= 52 \times 5 = 260 \text{ m}^3
 \end{aligned}$$



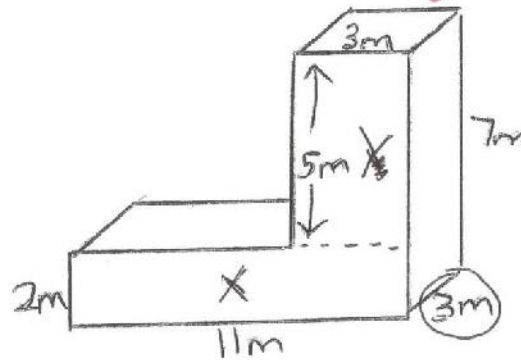
$$\begin{aligned}
 X &: 8 \times 8 = 64 \\
 Y &: 20 \times 6 = 120 + \\
 &\quad \underline{184} \\
 C &= 184 \times 5 = 920 \text{ m}^3
 \end{aligned}$$



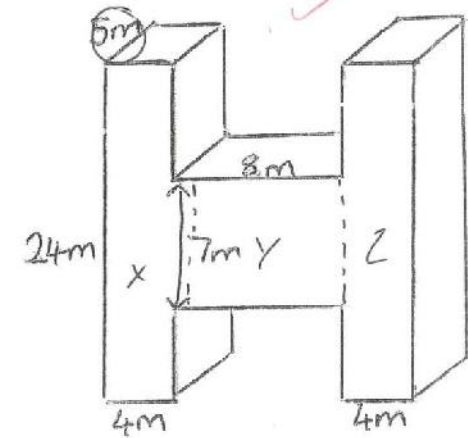
$$\begin{aligned}
 X &: 4 \times 15 = 60 \\
 Y &: 4 \times 7 = 28 \\
 Z &: 4 \times 7 = 28 + \\
 &\quad \underline{116} \\
 C &= 116 \times 3 = 348 \text{ m}^3
 \end{aligned}$$



$$\begin{aligned}
 X &: 10 \times 50 = 500 \\
 Y &: 9 \times 5 = 45 + \\
 &\quad \underline{545} \\
 C &= 545 \times 4 = 2180 \text{ m}^3
 \end{aligned}$$



$$\begin{aligned}
 X &: 2 \times 11 = 22 \\
 Y &: 3 \times 5 = 15 + \\
 &\quad \underline{37} \\
 C &= 37 \times 3 = 111 \text{ m}^3
 \end{aligned}$$



$$\begin{aligned}
 X &: 4 \times 24 = 96 \\
 Y &: 7 \times 8 = 56 \\
 Z &: 4 \times 24 = 96 + \\
 &\quad \underline{248} \\
 C &= 248 \times 5 = 1240 \text{ m}^3
 \end{aligned}$$

Cwraith Dosbath

Lefel 5

"Cyfrifo rhannau ffracsiynol neu ganrannol o feintiau a mesuriadau"

Nod y wers : Cwraith ar ffracsiynol

Enghraifft

① $\frac{1}{2} \circ 16 = 8$ ✓ ② $\frac{1}{4} \circ 24 = 6$ ✓ ③ $\frac{1}{3} \circ 33 = 11$ ✓
④ $\frac{1}{8} \circ 56 = 7$ ✓ ⑤ $\frac{2 \times 6}{7 \div 5} \circ 70 = 10 \times 2 = 20$ ✓
⑥ $\frac{5}{9} \circ 72 = 8 \times 5 = 40$ ✓

① $\frac{1}{2} \circ 24 = 12$ ✓ ③ $\frac{1}{5} \circ 40 = 8$ ✓ ⑤ $\frac{1}{8} \circ 56 = 7$ ✓
② $\frac{1}{4} \circ 16 = 4$ ✓ ④ $\frac{1}{7} \circ 42 = 6$ ✓ ⑥ $\frac{1}{9} \circ 108 = 12$ ✓

⑦ $\frac{2}{9} \circ 81 = 18$ ✓ ⑧ $\frac{2}{5} \circ 60 = 24$ ✓ ⑪ $\frac{3}{8} \circ 48 = 18$ ✓

⑧ $\frac{3}{4} \circ 16 = 12$ ✓ ⑩ $\frac{3}{5} \circ 25 = 15$ ✓ ⑫ $\frac{2}{9} \circ 72 = 16$ ✓

⑬ $\frac{4}{7} \circ 63 = 36$ ✓ ⑭ $\frac{5}{8} \circ 24 = 15$ ✓ ⑮ $\frac{6}{7} \circ 77 = 66$ ✓

⑯ $\frac{2}{9} \circ 63 = 14$ ✓ ⑰ $\frac{3}{5} \circ 120 = 72$ ✓ ⑱ $\frac{4}{7} \circ 280 = 160$ ✓

⑲ $\frac{2}{5} \circ 250 = 100$ ✓ ⑳ $\frac{3}{7} \circ 490 = 210$ ✓

E. Powell
18/11/13

Fractions of Shapes

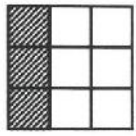
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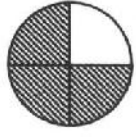
Write the fraction for both the shaded and unshaded parts of the shapes below

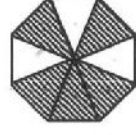
Shade the following shapes according to the fraction given

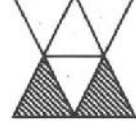
Shade the following shapes according to the fraction given

1  Shaded: $\frac{1}{3}$ Unshaded: $\frac{2}{3}$

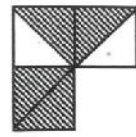
2  Shaded: $\frac{3}{9}$ Unshaded: $\frac{6}{9}$

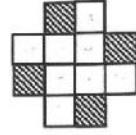
3  Shaded: $\frac{2}{4}$ Unshaded: $\frac{2}{4}$

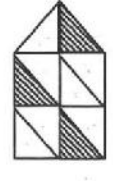
4  Shaded: $\frac{2}{6}$ Unshaded: $\frac{4}{6}$

5  Shaded: $\frac{2}{4}$ Unshaded: $\frac{2}{4}$

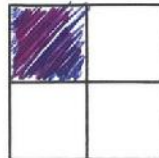
6  Shaded: $\frac{24}{48}$ Unshaded: $\frac{24}{48}$

7  Shaded: $\frac{2}{6}$ Unshaded: $\frac{4}{6}$

8  Shaded: $\frac{4}{12}$ Unshaded: $\frac{8}{12}$

9  Shaded: $\frac{2}{10}$ Unshaded: $\frac{8}{10}$

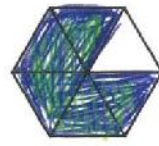
10  $\frac{1}{2}$

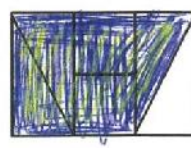
11  $\frac{1}{4}$

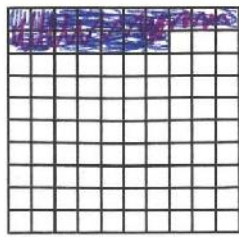
12  $\frac{2}{4}$

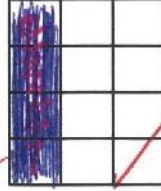
13  $\frac{2}{6}$

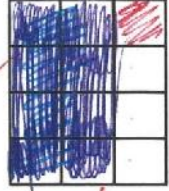
14  $\frac{3}{6}$

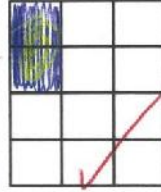
15  $\frac{2}{6}$

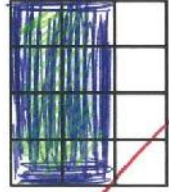
16  $\frac{2}{6}$

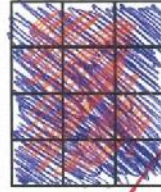
17  $\frac{10}{100}$

18  $\frac{3}{9}$

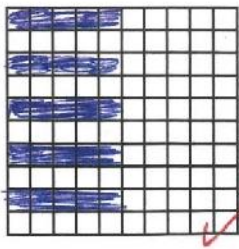
19  $\frac{4}{16}$

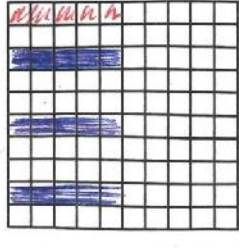
20  $\frac{3}{9}$

21  $\frac{3}{9}$

22  $\frac{3}{9}$

23  $\frac{3}{9}$

24  $\frac{5}{25}$

25  $\frac{5}{25}$

fractiynau

A 1. $\frac{1}{4} \circ 8 = 2$ ✓ 2. $\frac{1}{3} \circ 12 = 4$ ✓ 3. $\frac{1}{2} \circ 10 = 5$ ✓

4. $\frac{1}{5} \circ 10 = 2$ ✓ 5. $\frac{1}{4} \circ 16 = 4$ ✓ 6. $\frac{1}{3} \circ 6 = 2$ ✓

7. $\frac{1}{4} \circ 20 = 5$ ✓ 8. $\frac{1}{5} \circ 20 = 4$ ✓ 9. $\frac{1}{7} \circ 14 = 2$ ✓

10. $\frac{1}{6} \circ 18 = 3$ ✓ 11. $\frac{1}{3} \circ 15 = 5$ ✓ 12. $\frac{1}{4} \circ 24 = 6$ ✓

13. $\frac{1}{3} \circ 18 = 6$ ✓ 14. $\frac{1}{6} \circ 24 = 4$ ✓ 15. $\frac{1}{2} \circ 22 = 11$ ✓

16. $\frac{1}{3} \circ 30 = 10$ ✓ 17. $\frac{1}{7} \circ 28 = 4$ ✓ 18. $\frac{1}{4} \circ 32 = 8$ ✓

19. $\frac{1}{6} \circ 60 = 10$ ✓ 20. $\frac{1}{5} \circ 25 = 5$ ✓ 21. $\frac{1}{9} \circ 27 = 3$ ✓

22. $\frac{1}{8} \circ 32 = 4$ ✓ 23. $\frac{1}{3} \circ 36 = 12$ ✓ 24. $\frac{1}{5} \circ 40 = 8$ ✓

25. $\frac{1}{8} \circ 40 = 5$ ✓ 26. $\frac{1}{9} \circ 54 = 6$ ✓ 27. $\frac{1}{8} \circ 64 = 8$ ✓

28. $\frac{1}{3} \circ 27 = 9$ ✓ 29. $\frac{1}{7} \circ 56 = 8$ ✓ 30. $\frac{1}{8} \circ 72 = 9$ ✓

B 1. $\frac{2}{3} \circ 12 = 8$ ✓ 2. $\frac{2}{5} \circ 10 = 4$ ✓ 3. $\frac{3}{4} \circ 8 = 6$ ✓

4. $\frac{2}{3} \circ 15 = 10$ ✓ 5. $\frac{3}{4} \circ 20 = 15$ ✓ 6. $\frac{2}{5} \circ 15 = 6$ ✓

7. $\frac{2}{3} \circ 18 = 12$ ✓ 8. $\frac{3}{4} \circ 12 = 9$ ✓ 9. $\frac{2}{3} \circ 30 = 20$ ✓

10. $\frac{2}{5} \circ 20 = 8$ ✓ 11. $\frac{3}{4} \circ 16 = 12$ ✓ 12. $\frac{4}{5} \circ 30 = 24$ ✓

13. $\frac{2}{3} \circ 24 = 16$ ✓ 14. $\frac{3}{5} \circ 25 = 15$ ✓ 15. $\frac{3}{4} \circ 40 = 30$ ✓

16. $\frac{5}{6} \circ 12 = 10$ ✓ 17. $\frac{3}{5} \circ 50 = 30$ ✓ 18. $\frac{4}{7} \circ 14 = 8$ ✓

19. $\frac{3}{7} \circ 21 = 9$ ✓ 20. $\frac{4}{9} \circ 18 = 8$ ✓ 21. $\frac{3}{8} \circ 16 = 6$ ✓

22. $\frac{2}{7} \circ 21 = 6$ ✓ 23. $\frac{5}{6} \circ 18 = 15$ ✓ 24. $\frac{4}{7} \circ 14 = 8$ ✓

$$25. \frac{8}{9} \circ 18 = 16 \quad 26. \frac{5}{8} \circ 24 = 15 \quad 27. \frac{6}{9} \circ 18 = 12$$

$$28. \frac{2}{7} \circ 28 = 8 \quad 29. \frac{6}{7} \circ 35 = 30 \quad 30. \frac{2}{3} \circ 36 = 24$$

$$31. \frac{3}{4} \circ 44 = 33 \quad 32. \frac{2}{5} \circ 60 = 24 \quad 33. \frac{2}{3} \circ 27 = 18$$

$$34. \frac{4}{5} \circ 55 = 44 \quad 35. \frac{5}{6} \circ 60 = 50 \quad 36. \frac{3}{8} \circ 72 = 27$$

$$37. \frac{6}{7} \circ 77 = 66 \quad 38. \frac{5}{8} \circ 80 = 50 \quad 39. \frac{1}{9} \circ 72 = 8$$

$$40. \frac{4}{7} \circ 77 = 44 \quad 41. \frac{5}{8} \circ 64 = 40 \quad 42. \frac{4}{9} \circ 81 = 36$$

$$43. \frac{6}{7} \circ 56 = 48 \quad 44. \frac{7}{8} \circ 96 = 84 \quad 45. \frac{8}{9} \circ 108 = 96$$



Lalrin Kosser

Missing Fractions Grid.

Write in the missing values.

/ Ffracsyniau coll.

Wenwch y gwerthoedd coll



	whole	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{7}{10}$
1).	720g	360g	180g	540g	90g	270g	240g	480g	120g	600g	144g	72g	504g
2).	600cm	300cm	150cm	450cm	75cm	225cm	200cm	400cm	100cm	500cm	120cm	60cm	420cm
3).	£10.80	£5.40	£2.70	£8.10	£1.35	£4.05	£3.60	£7.20	£1.80	£9	£2.60	£1.08	£7.56
4).	9kg	4.5kg	2.25kg	6.75kg	1.125kg	3.375kg	3kg	6kg	1.5kg	0.3kg	1.8kg	0.9kg	6.3kg
5).	120cm	60cm	30cm	90cm	15cm	45cm	15cm	80cm	20cm	100cm	24cm	12cm	84cm
6).	96cm	48cm	24cm	72cm	12cm	36cm	32cm	64cm	16cm	80cm	19.2cm	9.6cm	67.2cm
7).	2.4m	1.2m	0.6m	1.80m	0.3m	0.9m	0.8m	1.6m	0.4m	2m	0.48m	0.24m	1.68m
8).	£24.00	£12.00	£6.00	£18.00	£3.00	£9.00	£8.00	£16.00	£4.00	£20.00	£4.80	£2.40	£16.80
9).	6kg	3kg	1.5kg	4.5kg	0.75kg	2.25kg	2kg	4kg	1kg	5kg	1.2kg	0.6kg	4.2kg
10).	444p	222p	111p	333p	55p	166p	148p	296p	74p	370p	88p	44p	310p



Gwaith Dosbarth

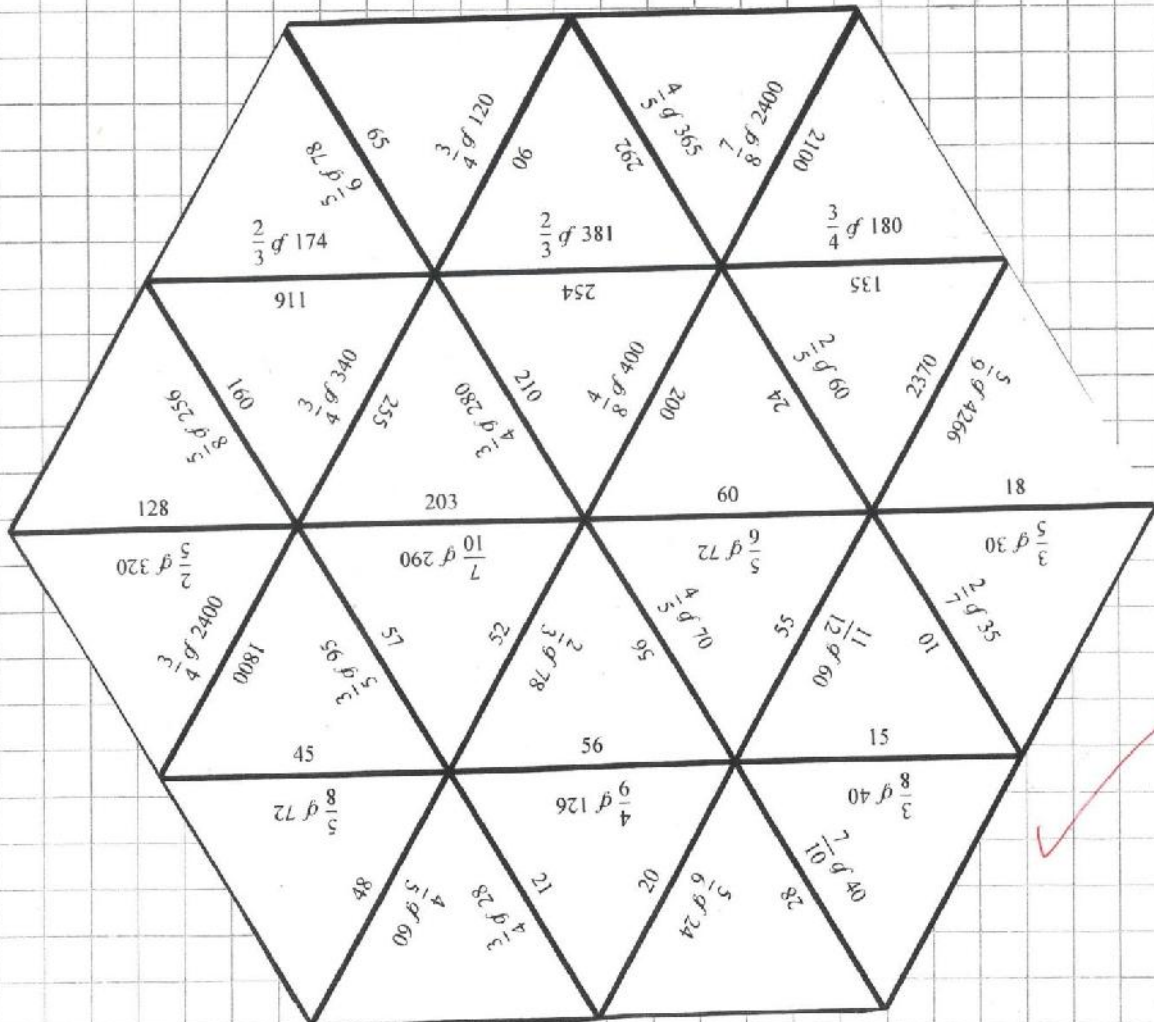
27/11/13

Cwrs Cynnar - Cyfrifwch yr atebion i'r alynol:

1) $\frac{1}{5} \circ 35 = 7$ ✓ 2) $\frac{3}{4} \circ 24 = 18$ ✓ 3) $\frac{2}{7} \circ 56 = 16$ ✓

4) $\frac{2}{9} \circ 81 = 18$ ✓ 5) $\frac{3}{7} \circ 490 = 210$ 6) $\frac{3}{8} \circ 500 = 300$ ✓

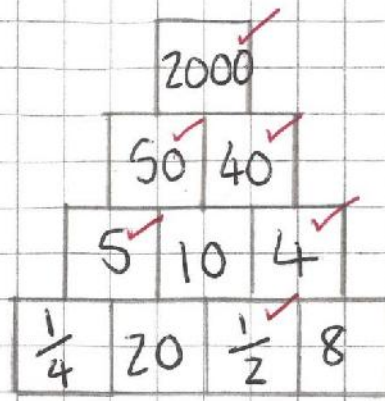
7) $\frac{2}{11} \circ 110 = 20$ ✓ 8) $\frac{3}{9} \circ 720 = 240$



Gwirth Dosbarth

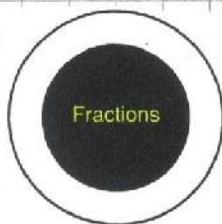
28.11.13

Cwrs Cyntaf

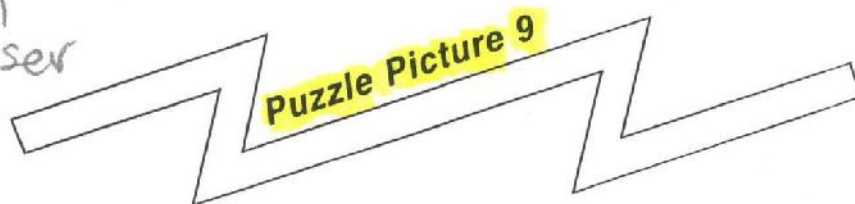


X

Nod y wers : Cyfrifo fracsynau cyfwerth trwy symleiddio



Cathin Rosser



Choose one or both of the sets of sums and work out all the answers.

On the diagram opposite colour each area which contains one of the answers.

What do you see?



First Set

Simplify these fractions as much as possible

1. $\frac{2}{6} = \frac{1}{3}$ ✓

2. $\frac{6}{8} = \frac{3}{4}$ ✓

3. $\frac{2}{8} = \frac{1}{4}$ ✓

4. $\frac{10}{15} = \frac{2}{3}$ ✓

5. $\frac{6}{15} = \frac{2}{5}$ ✓

6. $\frac{3}{18} = \frac{1}{6}$ ✓

7. $\frac{9}{15} = \frac{3}{5}$ ✓

8. $\frac{3}{15} = \frac{1}{5}$ ✓

9. $\frac{8}{14} = \frac{4}{7}$ ✓

10. $\frac{16}{30} = \frac{8}{15}$ ✓

11. $\frac{20}{48} = \frac{5}{12}$ ✓

12. $\frac{21}{27} = \frac{7}{9}$ ✓

13. $\frac{3}{36} = \frac{1}{12}$ ✓

14. $\frac{18}{20} = \frac{9}{10}$ ✓

15. $\frac{21}{30} = \frac{7}{10}$ ✓

16. $\frac{25}{40} = \frac{5}{8}$ ✓

17. $\frac{28}{32} = \frac{7}{8}$ ✓

18. $\frac{50}{100} = \frac{1}{2}$ ✓

19. $\frac{70}{120} = \frac{7}{12}$ ✓

20. $\frac{36}{64} = \frac{9}{16}$ ✓

21. $\frac{24}{30} = \frac{4}{5}$ ✓

22. $\frac{25}{30} = \frac{5}{6}$ ✓

23. $\frac{30}{100} = \frac{3}{10}$ ✓

24. $\frac{48}{56} = \frac{6}{7}$ ✓

nod y wers : Cyfrifo canranau heb gyfrifiannell

$$1) 10\% \text{ o } £20 = \frac{20}{10} = £2$$

$$2) 10\% \text{ o } £5 = \frac{5.00}{0.50} = 50p$$

$$3) 10\% \text{ o } £8.20 = 82p$$

$$4) 10\% \text{ o } £79 = £7.90$$

Ymarfer

$$① 10\% \text{ o } £50 = £5 \checkmark$$

$$② 10\% \text{ o } £9 = £90p \checkmark$$

$$③ 10\% \text{ o } £6.30 = £63p \checkmark$$

$$④ 10\% \text{ o } £299 = £29.90 \checkmark$$

$$⑤ 10\% \text{ o } £61.30 = £6.13 \checkmark$$

$$① 20\% \text{ o } £50 = £10 \checkmark$$

$$② 20\% \text{ o } £9 = £1.80 \checkmark$$

$$③ 20\% \text{ o } £6.30 = £1.26 \checkmark$$

$$④ 20\% \text{ o } £299 = £59.80 \checkmark$$

$$⑤ 20\% \text{ o } £61.30 = £12.26 \checkmark$$

$$① 30\% \text{ o } £5 = £1.5 \checkmark$$

$$② 30\% \text{ o } £9 = £2.70 \checkmark$$

$$③ 30\% \text{ o } £6.30 = £1.89 \checkmark$$

$$④ 30\% \text{ o } £299 = £89.70 \checkmark$$

$$⑤ 30\% \text{ o } £61.30 = £18.39 \checkmark$$

Wedi deall sut i weithio allan 10%, 20% a 30%

$$6.1) 10\% \text{ o } £180 = £18 \times 4 = \cancel{£72} \\ 180 - 72 = \cancel{£108}$$

$$6.2) 10\% \text{ o } £840 = £84 \times 4 = \cancel{£336} \\ 840 - 336 = \cancel{£504}$$

$$6.3) 10\% \text{ o } £440 = £44 \times 4 = \cancel{£176} \\ 440 - 176 = \cancel{£264}$$

$$6.4) 10\% \text{ o } £260 = £26 \times 4 = \cancel{£104} \\ 260 - 104 = \cancel{£156}$$

Gwaith Dosbarth

11.12.13

Adolygu

 Sympleiddioch:-

$$\textcircled{1} \frac{5}{10} = \frac{1}{2} \checkmark$$

$$\textcircled{2} \frac{4}{20} = \frac{1}{5} \checkmark$$

$$\textcircled{3} \frac{28}{48} = \frac{7}{12} \checkmark$$

$$\textcircled{4} \frac{40}{50} = \frac{4}{5} \checkmark$$

$$\textcircled{5} \frac{24}{40} = \frac{3}{5} \checkmark$$

$$\textcircled{6} \frac{8}{20} = \frac{2}{5} \checkmark$$

$$\textcircled{7} \frac{15}{18} = \frac{5}{6} \checkmark$$

$$\textcircled{8} \frac{11}{44} = \frac{1}{4} \checkmark$$

$$\textcircled{9} \frac{18}{40} = \frac{9}{20} \checkmark$$

$$\textcircled{10} \frac{400}{500} = \frac{4}{5} \checkmark$$

② llenwch y bylchau :-

$$\textcircled{1} \frac{4}{5} = \frac{8}{10} \checkmark$$

(x2 over 5, x2 under 4)

$$\textcircled{2} \frac{2}{3} = \frac{10}{15} \checkmark$$

(x5 over 3, x5 under 2)

$$\textcircled{3} \frac{6}{8} = \frac{24}{32} \checkmark$$

(x4 over 8, x4 under 6)

$$\textcircled{4} \frac{1}{20} = \frac{10}{200} \checkmark$$

(x10 over 20, x10 under 1)

③

$$\textcircled{1} \frac{4}{5} \circ 20 = 16 \checkmark \quad \textcircled{2} \frac{3}{5} \circ 40 = 24 \checkmark \quad \textcircled{3} \frac{1}{3} \circ 18 = 6 \checkmark$$

$$\textcircled{4} \frac{5}{6} \circ 24 = 20 \checkmark \quad \textcircled{5} \frac{3}{8} \circ 72 = 27 \checkmark \quad \textcircled{6} \frac{2}{3} \circ 300 = 200 \checkmark$$

$$\textcircled{7} \frac{2}{5} \circ 600 = 240 \checkmark \quad \textcircled{8} \frac{1}{9} \circ 720 = 80 \checkmark \quad \textcircled{9} \frac{2}{7} \circ 420 = 120 \checkmark$$

$$\textcircled{10} \frac{3}{8} \circ 240 = 90 \checkmark$$

Adolygu

Sympleiddiwrch :

$$\textcircled{1} \frac{10}{40} = \frac{1}{4} \checkmark$$

(x10 over 10, x10 under 40)

$$\textcircled{2} \frac{8}{20} = \frac{2}{5} \checkmark$$

(x4 over 8, x4 under 20; x2 over 4, x2 under 20)

$$\textcircled{3} \frac{14}{21} = \frac{2}{3} \checkmark$$

(x7 over 14, x7 under 21)

② llenwch y bylchau:

$$\text{a) } \frac{4}{20} = \frac{1}{5} \checkmark$$

(x4 over 4, x4 under 20)

$$\text{b) } \frac{5}{16} = \frac{10}{32} \checkmark$$

(x2 over 5, x2 under 10; x2 over 16, x2 under 32)

$$\text{c) } \frac{8}{11} = \frac{32}{44} \checkmark$$

(x4 over 8, x4 under 32; x4 over 11, x4 under 44)

$$\textcircled{3} \frac{2}{9} \circ 81 = 18 \checkmark$$

$$\text{b) } \frac{2}{7} \circ 210 = 60 \checkmark$$

$$\text{c) } \frac{3}{4} \circ 400 = 300 \checkmark$$

$$\textcircled{4} \textcircled{a) \frac{1}{5} + \frac{2}{5} = \frac{3}{5}}$$

dim yn newid ✓

$$\textcircled{4} \textcircled{b) \frac{4}{7} - \frac{1}{7} = \frac{3}{7}}$$

dim yn newid ✓

$$\frac{2}{5} + \frac{1}{10}$$

$$\frac{2 \times 2}{5 \times 2} = \frac{4}{10}$$

dwblu

$$\frac{4}{10} + \frac{1}{10}$$

$$\frac{1 \times 3}{3} + \frac{5}{9} = \frac{8}{9}$$

✓

$$\frac{1}{3} = \frac{3}{9}$$

$$\frac{1 \times 5}{4} + \frac{3}{20}$$

✓

$$\frac{5}{20} + \frac{3}{20} = \frac{8}{20} = \frac{4}{10} = \frac{2}{5}$$

$$\frac{9}{25} - \frac{1 \times 5}{5 \times 5}$$

✓

$$\frac{9}{25} - \frac{5}{25} = \frac{4}{25}$$

$$\frac{1 \times 5}{3 \times 5} + \frac{2 \times 3}{5 \times 3}$$

$$\frac{5}{15} + \frac{6}{15} = \frac{11}{15}$$

$$3 \times 5 = 15$$

$$\textcircled{H) \frac{2 \times 8}{7 \times 8} + \frac{1 \times 7}{8 \times 7} = \frac{16}{56} + \frac{7}{56} = \frac{23}{56}}$$

$$7 \times 8 = 56$$

symleiddio? $\frac{13}{28}$

Ymarfer

$$\textcircled{1} \frac{2}{7} + \frac{4}{7} = \frac{6}{7} \checkmark$$

$$\textcircled{2} \frac{23}{16} - \frac{21}{16} = \frac{2}{16}$$

$$\textcircled{3} \frac{2}{5} + \frac{4}{25} = \frac{10}{25}$$

✓

$$\textcircled{4} \frac{8}{20} - \frac{1}{10} = \frac{6}{20} \checkmark$$

$$\textcircled{5} \frac{4}{5} - \frac{3}{4} = \frac{16}{20} - \frac{15}{20} = \frac{1}{20} \checkmark$$

Lefel 6

"Defnyddio cywerthoedd rhwng ffracsiynau"

Adio + tynnu ffracsiynau

① $\frac{2}{5} + \frac{1}{4}$

$\times 4 \left(\frac{8}{20} + \frac{5}{20} \right) \times 5$

5		4
10		8
15		12
<u>20</u>		<u>16</u>
		<u>20</u>

$$\frac{13}{20}$$

② $\frac{5}{6} - \frac{3}{4}$

$\times 2 \left(\frac{10}{12} - \frac{9}{12} \right) \times 3$

6		4
<u>12</u>		<u>8</u>
18		<u>12</u>
24		16

$$\frac{1}{12}$$

③ $\frac{2}{3} + \frac{5}{6}$

$\times 2 \left(\frac{4}{6} + \frac{5}{6} \right)$

3	6
6	12
9	18
12	24

$$\frac{9}{6} = 1\frac{3}{6} = 1\frac{1}{2}$$

YMARFER

$$1. \left(\frac{3}{4} + \frac{1}{2} \right) \times 2$$

$$\frac{3}{4} + \frac{2}{4} = \frac{5}{4} = 1 \frac{1}{4}$$

(4) 2
 8 (4)
 12 6

$$2. \left(\frac{1}{3} + \frac{1}{2} \right) \times 2$$

$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

$$3. \left(\frac{3}{4} + \frac{1}{8} \right) \times 2$$

$$\frac{6}{8} + \frac{1}{8} = \frac{7}{8}$$

Bydd anger
tip yn o
ymarfer.

mH 2/3/13

$$4. \left(\frac{2}{5} + \frac{3}{10} \right) \times 2$$

$$\frac{4}{10} + \frac{3}{10}$$

$$5. \left(\frac{3}{4} + \frac{1}{3} \right) \times 4$$

$$\frac{9}{12} + \frac{4}{12}$$

$$\frac{13}{12} = 1 \frac{1}{12}$$

$$6. \left(\frac{5}{6} + \frac{2}{3} \right) \times 2$$

$$\frac{5}{6} + \frac{4}{6}$$

$$\frac{11}{6} = 1 \frac{5}{6}$$

$$\textcircled{14} \frac{7}{8} + \frac{3}{16}$$

$$\times 4 \left(\frac{28}{32} + \frac{6}{32} \right) \times 2$$

$$\frac{34}{32} = 1\frac{2}{32}$$

$$\textcircled{15} \frac{3}{5} + \frac{2}{15}$$

$$\times 3 \left(\frac{9}{15} + \frac{2}{15} \right) \times 1$$

$$\frac{11}{15}$$

$$\textcircled{16} \frac{3}{8} + \frac{3}{4}$$

$$\times 1 \left(\frac{3}{8} + \frac{6}{8} \right) \times 2$$

$$\frac{9}{8} = 1\frac{1}{8}$$

$$\textcircled{17} \frac{1}{3} + \frac{1}{5}$$

$$\times 5 \left(\frac{5}{15} + \frac{3}{15} \right) \times 3$$

$$\frac{8}{15}$$

"Datrys amryw o hafaliadau llinol syml"

Ymchwiliad Tarsia

$$\begin{aligned}\textcircled{1} \quad 4x + 2 &= 16 \\ 4x &= 16 - 2 \\ 4x &= 14 \\ x &= 14 \div 4 \\ x &= 3.5\end{aligned}$$

$$\begin{aligned}\textcircled{2} \quad 5x - \\ 5x &= \\ 5x &= \\ x &= \\ x &= \end{aligned}$$

$$\begin{aligned}\textcircled{3} \quad 4x - 5 &= -1 \\ 4x &= -1 + 5 \\ 4x &= 4 \\ x &= 4 \div 4 \\ x &= 1\end{aligned}$$

$$\begin{aligned}\textcircled{4} \quad x - 3 &= -5 \\ x &= -5 + 3 \\ x &= -2\end{aligned}$$

$$\begin{aligned}\textcircled{5} \quad x + 3 &= -5 \\ x &= -5 - 3 \\ x &= -8\end{aligned}$$

$$\begin{aligned}\textcircled{6} \quad 3x - 5 &= -2 \\ 3x &= -2 + 5 \\ 3x &= 3 \\ x &= 3 \div 3 \\ x &= 1\end{aligned}$$

$$\begin{aligned}\textcircled{7} \quad 5x &= -10 \\ x &= -10 \div 5 \\ x &= -2\end{aligned}$$

$$\begin{aligned}\textcircled{8} \quad \frac{x}{5} + 8 &= x - 4 \\ 8 + 4 &= x - \frac{x}{5}\end{aligned}$$

$$\frac{4x}{5} = 12$$

$$\begin{aligned}x &= 12 \times 5 \div 4 \\ x &= 15\end{aligned}$$

$$\begin{aligned}\textcircled{9} \quad \text{Gwrio} \quad \sqrt{x} &= 5 \\ \text{sgwario} \quad x &= 5^2 \\ x &= 25\end{aligned}$$

$$\begin{aligned}\textcircled{10} \quad \sqrt{2x} &= 6 \\ \text{sgwario} \quad 2x &= 6^2 \\ 2x &= 36 \\ x &= 36 \div 2 \\ x &= 18\end{aligned}$$

⑪ GWIRIO

$$\sqrt{x} + 6 = 12$$

$$\sqrt{x} = 12 - 6$$

$$\sqrt{x} = 6$$

sgwario

$$x = 6^2$$

$$x = 36. \checkmark \text{ cywir}$$

⑫

$$4x - 3 = 19$$

$$4x = 19 + 3$$

$$4x = 22$$

$$x = 22 \div 4$$

$$x = 5.5 \checkmark$$

⑬ $3(x-4) = 6$

$$3x - 12 = 6$$

$$3x = 6 + 12$$

$$3x = 18$$

$$x = 18 \div 3$$

$$x = 6 \checkmark$$

⑭ $\frac{x}{4} - 5 = 5$

$$\frac{x}{4} = 5 + 5$$

$$\frac{x}{4} = 10$$

$$x = 10 \times 4$$

$$x = 40 \checkmark$$

⑮ GWIRIO $20 - x = 17$

$$x = 20 - 17$$

$$x = 2.5 \checkmark$$

cywir

⑯ $6x - 5 = 2x + 4$

$$6x - 2x = 4 + 5$$

$$4x = 9$$

$$x = 9 \div 4$$

$$x = 2.25 \checkmark$$

⑰ $\frac{x}{2} = 4$

$$x = 4 \times 2$$

$$x = 8 \checkmark$$

⑱ $5(x-1) = 30$

$$5x - 5 = 30$$

$$5x = 35$$

$$x = 35 \div 5 = 7 \checkmark$$

⑲ GWIRIO $\frac{3x}{2} + 3 = 18$

$$\frac{3x}{2} = 18 - 3$$

$$\frac{3x}{2} = 15$$

$$x = 15 \times 2 \div 3$$

$$x = 10 \checkmark \text{ cywir}$$

⑳ $\frac{x}{11} = 1$

$$x = 1 \times 11$$

$$x = 11 \checkmark$$

㉑ $5x^2 = 20$

$$x^2 = 20 \div 5$$

$$x^2 = 4$$

$$x = \sqrt{4}$$

$$x = 2 \checkmark$$

㉒ $\frac{21}{x} = 7$

$$x = 21 \div 7$$

$$x = 3 \checkmark$$

㉓ $3x + 2 = 5x - 8$

$$5x - 3x = 2 + 8$$

$$2x = 10$$

$$x = 10 \div 2$$

$$x = 5 \checkmark$$

㉔ GWIRIO $\sqrt[3]{x} = 4$

$$x = 4^3$$

$$x = 64 \checkmark \text{ cywir}$$

㉕ $\sqrt[3]{x} = 3$

$$x = 3^3$$

$$x = 27 \checkmark$$

㉖ $x^2 - 1 = 15$

$$x^2 = 15 + 1$$

$$x^2 = 16$$

$$x = \sqrt{16}$$

$$x = 4 \checkmark$$

㉗ $x - 1 = 1$

$$x = 1 + 1$$

$$x = 2 \checkmark$$

㉘ GWIRIO $\frac{x^2}{2} = 72$

$$x^2 = 72 \times 2 = 144$$

$$x = \sqrt{144}$$

$$x = 12 \checkmark \text{ cywir}$$