

## **Lefel 3 Cymhwyso Sgiliau Rhif Hanfodol Prawf sampl cadarnhau 1**

Hyd - ar y mwyaf: 60 munud

### **Nodyn pwysig**

Mae hwn yn brawf sampl cadarnhau, cyhoeddwyd ar y cyd gan y pedwar corff dyfarnu Sgiliau Hanfodol (Agored Cymru, City & Guilds, Pearson a CBAC).

Mae'r prawf sampl yn rhoi arwydd o fformat a strwythur y profion cadarnhaol byw.

Mae dogfen arall sydd yn cynnwys yr allwedd atebion (atebion cywir) a chyfeirnodau'r fanyleb hefyd ar gael.

**Mae'r prawf cadarnhau hwn- yn cynnwys 30 o gwestiynau aml-ddewis.**

## **Level 3 Essential Application of Number Skills Sample Confirmatory test**

Maximum duration: 60 minutes

### **Important note**

This is a live confirmatory test, developed jointly by the four Essential Skills Wales awarding bodies (Agored Cymru, City & Guilds, Pearson and WJEC).

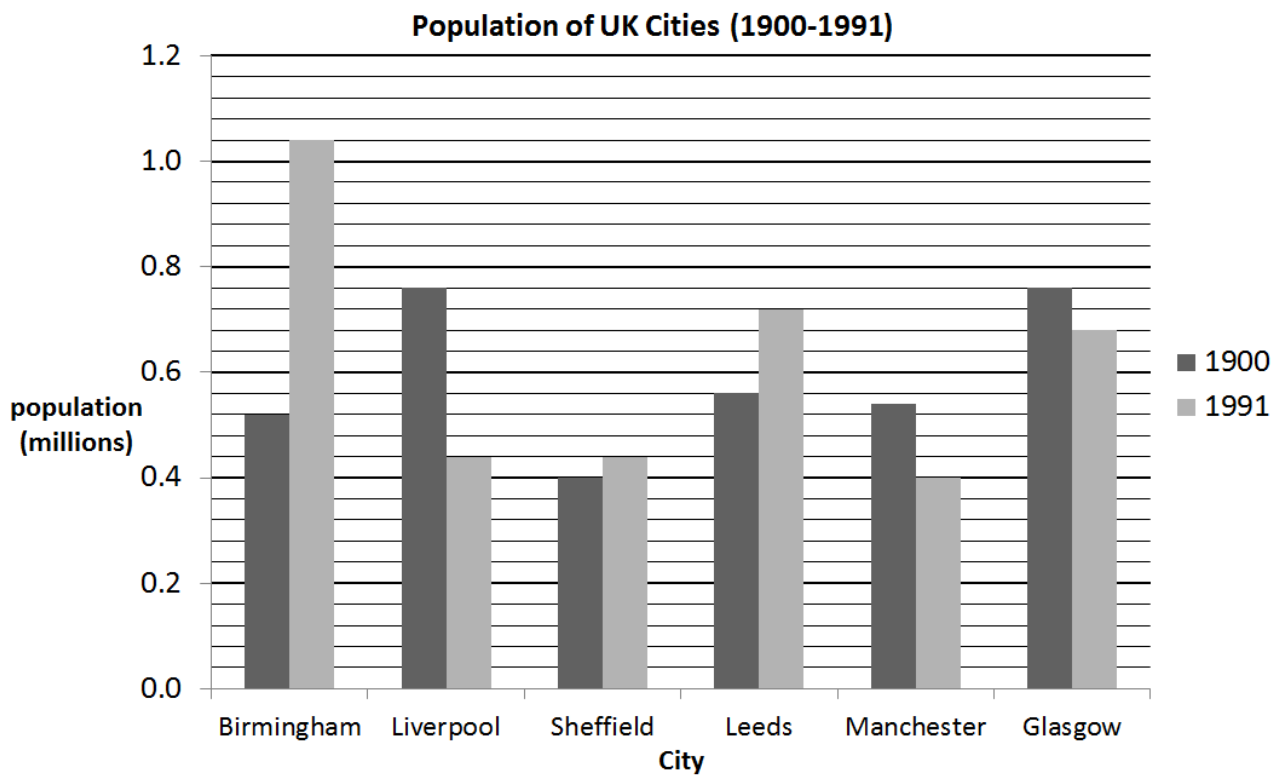
This sample test provides an indication of the likely format and structure of the live confirmatory tests.

A separate document, containing the answer keys (correct answers) and specification references is also available.

**This confirmatory test consists of 30 multiple choice questions.**

**Questions 1 to 4 are about the population of cities.**

1. This graph shows the change in population of some cities in the UK.

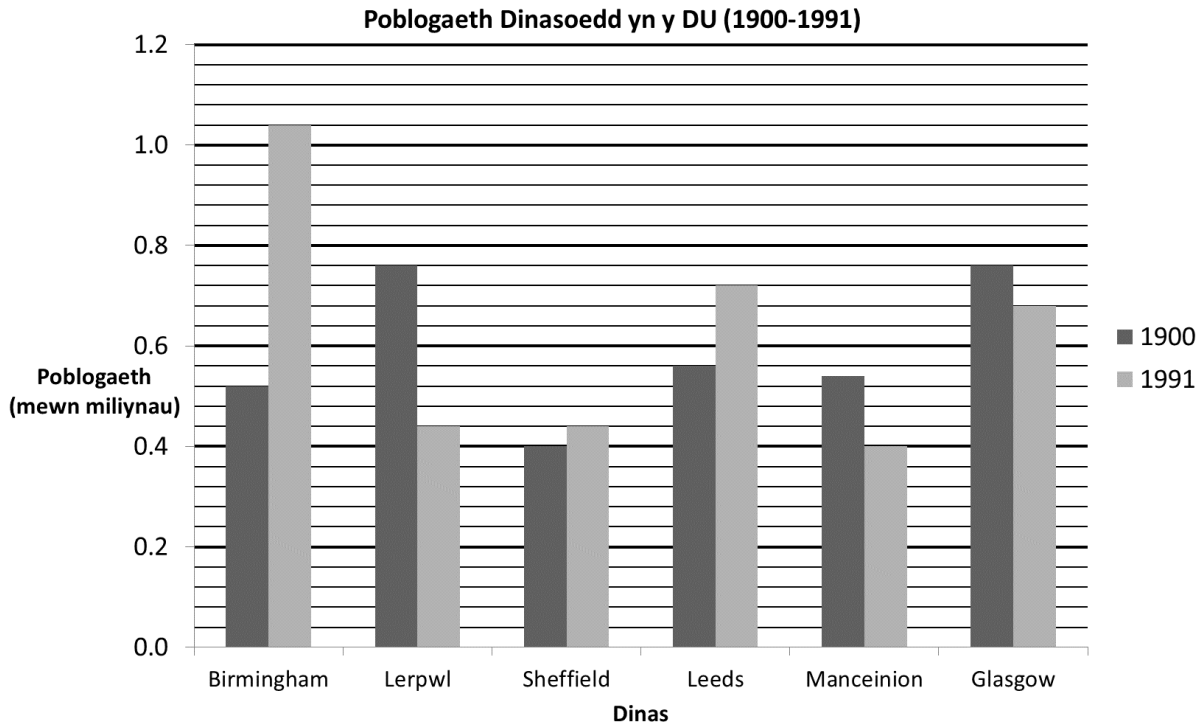


What was the difference between the populations of Birmingham and Liverpool in 1900?

A	0.21 million
B	0.22 million
C	0.24 million
D	0.26 million

**Mae Cwestiynau 1 i 4 yn sôn am boblogaeth dinasoedd.**

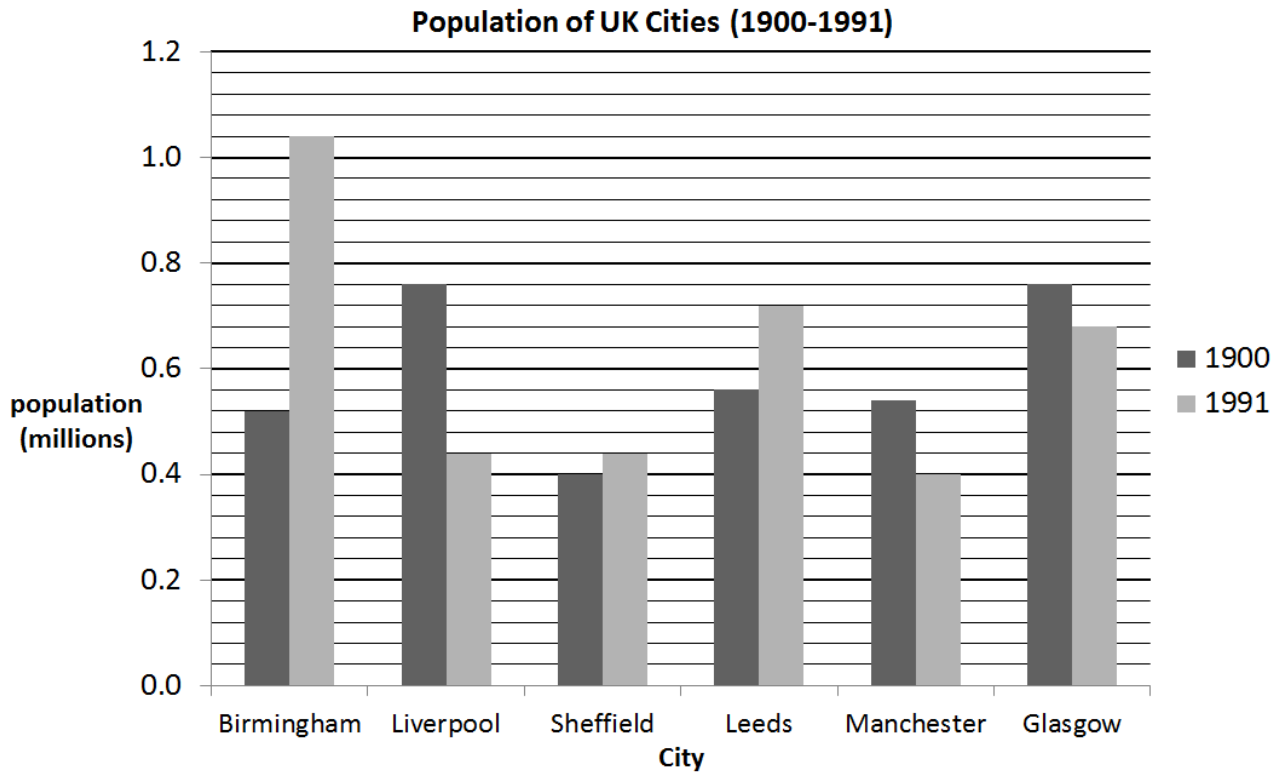
1. Mae'r graff isod yn dangos y newid a fu ym mhoblogaeth rhai dinasoedd yn y DU.



Beth oedd y gwahaniaeth rhwng poblogaeth Birmingham a phoblogaeth Lerpwl yn 1900?

A	0.21 miliwn	
B	0.22 miliwn	
C	0.24 miliwn	
D	0.26 miliwn	

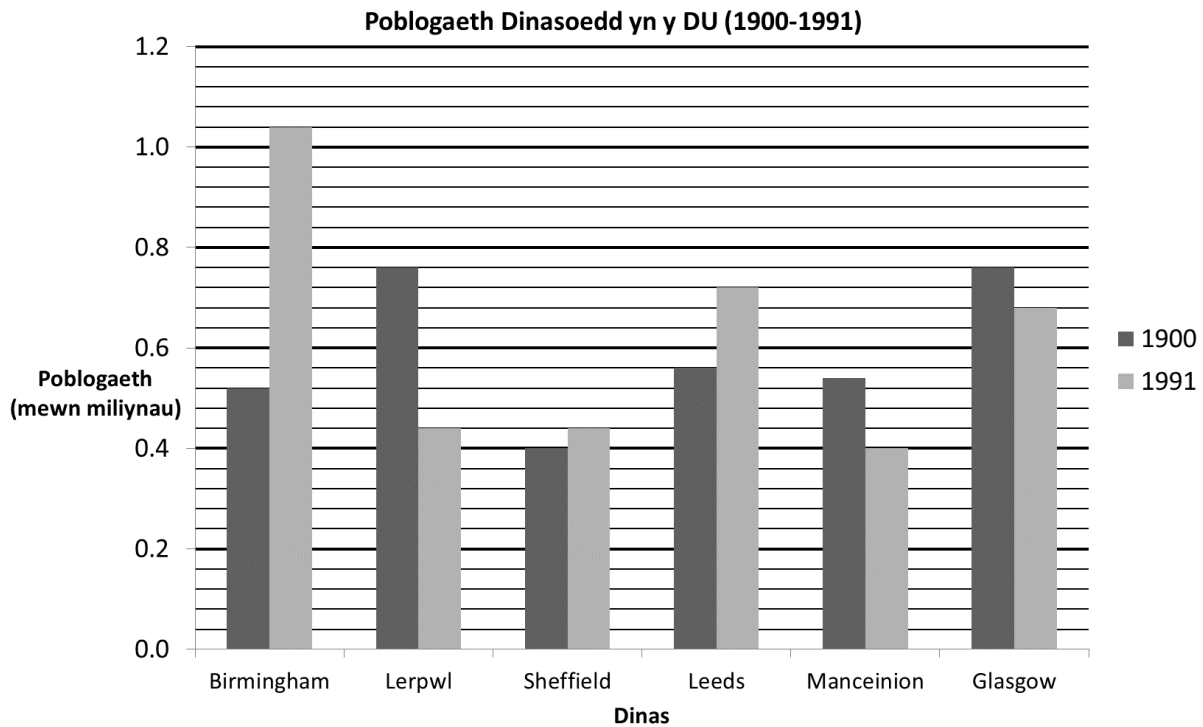
2. This graph shows the change in population of some cities in the UK.



Which of these statements is correct?

A	In 1991 the population of Birmingham was three times greater than the population of Manchester
B	Between 1900 and 1991 the population of Sheffield changed by less than 20 000
C	The population of Glasgow was 50% greater than the population of Liverpool in 1991
D	The increase in the population of Leeds is four times greater than the increase in the population of Sheffield between 1990 and 1991

2. Mae'r graff isod yn dangos y newid a fu ym mhoblogaeth rhai dinasoedd yn y DU.



Pa un o'r datganiadau hyn sy'n gywir?

A	Yn 1991 roedd poblogaeth Birmingham dair gwaith yn fwy na phoblogaeth Manceinion	
B	Rhwng 1900 a 1991 roedd poblogaeth Sheffield wedi newid llai nag 20 000	
C	Roedd poblogaeth Glasgow 50% yn fwy na phoblogaeth Lerpwl yn 1991	
D	Roedd y twf ym mhoblogaeth Leeds bedair gwaith yn fwy na'r twf ym mhoblogaeth Sheffield rhwng 1900 a 1991	

3. In 1901 Swansea had a population of  $9.45 \times 10^4$

In 2015 its population was  $2.42 \times 10^5$

By how much did the population of Swansea grow between 1901 and 2015?

A	147 500
B	70 300
C	14 750
D	7 030

3. Yn 1901 roedd poblogaeth Abertawe yn  $9.45 \times 10^4$

Yn 2015 roedd poblogaeth y ddinas yn  $2.42 \times 10^5$

Faint o dwf a fu ym mhoblogaeth Abertawe rhwng 1901 a 2015?

A	147 500
B	70 300
C	14 750
D	7 030

4. The population of Wales is 3.1 million.

The expected growth in population is 0.3% per year.

Which calculation gives the expected population after 3 years?

A	$3.1 \times 1.003^3$
B	$3.1 \times 1.003 \times 3$
C	$3.1 \times 1.03^3$
D	$3.1 \times 1.03 \times 3$

4. 3.1 miliwn yw poblogaeth Cymru.

Mae disgwyl i'r boblogaeth dyfu 0.3% bob blwyddyn.

Pa un o'r cyfrifiadau isod sy'n rhoi'r ateb cywir o ran rhagweld beth fydd maint y boblogaeth ar ôl 3 blynedd?

A	$3.1 \times 1.003^3$
B	$3.1 \times 1.003 \times 3$
C	$3.1 \times 1.03^3$
D	$3.1 \times 1.03 \times 3$



**Questions 5 to 7 are about a farmer's field.**

5. A farmer has a field with an area of 4 hectares.

She sells it for £8000 per acre.

1 hectare = 2.47 acres
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What is the total selling price for the field?

A	£4940	
B	£12955	
C	£51760	
D	£79040	

**Mae Cwestiynau 5 i 7 yn sôn am gae sy'n perthyn i ffermwr.**

5. Mae gan ffermwr gae gydag arwynebedd o 4 hectar.

Mae'n gwerthu'r cae am £8000 yr erw.

1 hectar = 2.47 erw

Beth fydd pris gwerthu'r cae i gyd gyda'i gilydd?

A	£4,940	
B	£12,955	
C	£51,760	
D	£79,040	

6. This equation is used to calculate the maximum number of cows that should graze in a field.

$$a = 0.4c - 0.01c^2$$

Where **c** is the number of grazing cows  
**a** is the area of the field in hectares.

What is the minimum area of a field that can accommodate 6 grazing cows?

A	2.04 hectares
B	2.28 hectares
C	2.364 hectares
D	2.76 hectares

6. Mae'r hafaliad isod yn cael ei ddefnyddio i gyfrifo uchafswm y gwartheg y dylid eu rhoi i bori mewn cae.

$$a = 0.4c - 0.01c^2$$

Lle mai **c** yw nifer y gwartheg sy'n pori  
**a** yw arwynebedd y cae mewn hectarau.

Beth yw lleiafswm yr arwynebedd sydd ei angen mewn cae i roi digon o le i 6 buwch bori?

A	2.04 hecтар	
B	2.28 hecтар	
C	2.364 hecтар	
D	2.76 hecтар	

7. A field can support a maximum of either 15 grazing cows or 25 horses.

What is the maximum number of horses that can be kept in a field that can support 25 grazing cows?

A	35
B	40
C	41
D	42

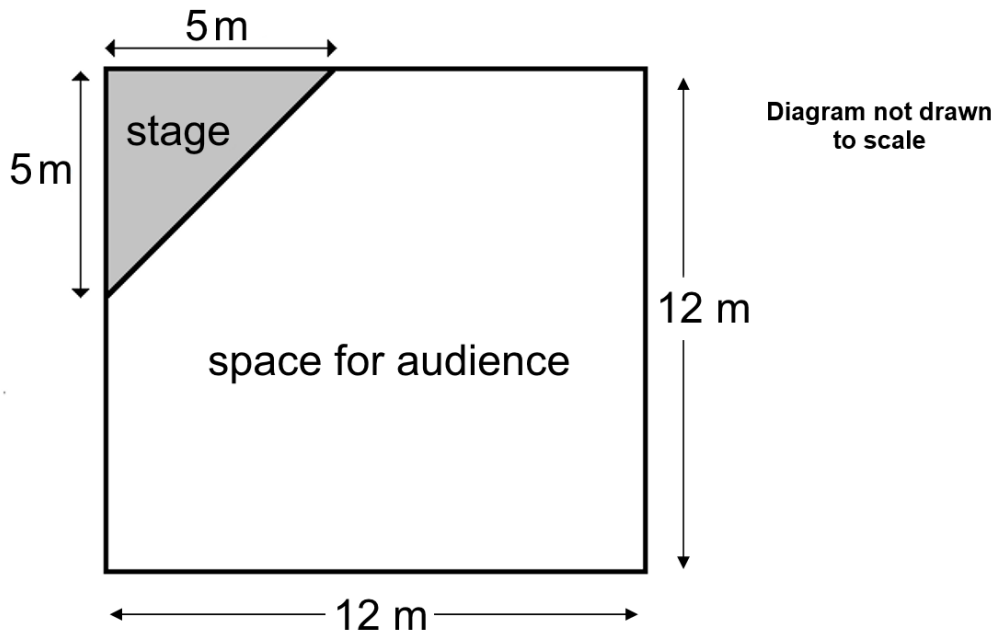
7. Mae cae yn ddigon mawr i gynnal uchafswm o naill ai 15 buwch sy'n pori neu 25 ceffyl.

Beth yw'r nifer mwyaf o geffylau y gellir eu cadw mewn cae sy'n gallu cynnal 25 buwch yn pori?

A	35	
B	40	
C	41	
D	42	

Questions 8 to 10 are about a concert.

8. This is a plan of a concert hall. It has a triangular stage.

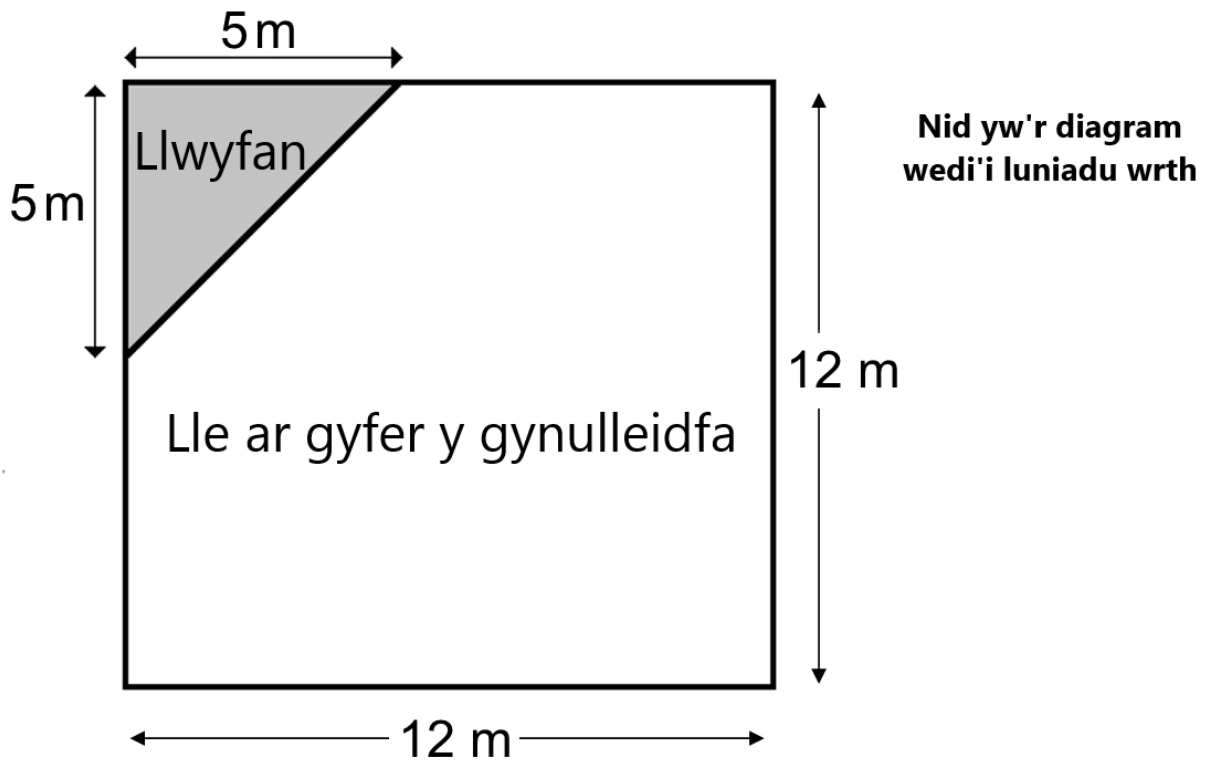


What is the area of space for the audience?

A	119 m <sup>2</sup>
B	121.5 m <sup>2</sup>
C	131.5 m <sup>2</sup>
D	139 m <sup>2</sup>

Mae Cwestiynau 8 i 10 yn sôn am gyngerdd.

8. Dyma gynllun neuadd gyngerdd. Mae llwyfan siâp triongl ynddo.



Beth yw arwynebedd y lle sydd wedi'i neilltuo ar gyfer y gynulleidfa?

A	119 m <sup>2</sup>	
B	121.5 m <sup>2</sup>	
C	131.5 m <sup>2</sup>	
D	139 m <sup>2</sup>	

9. At a different venue, the space for the audience is 240 m<sup>2</sup>.

There should be a maximum of 1.5 people per square metre.

The cost of organising a concert is £1 150

Tickets are £9 each.

The maximum number of people buy tickets.

How much money is left over after the cost of organising the concert is paid?

A	£2 190
B	£2 090
C	£310
D	£290

9. Mewn lleoliad gwahanol, mae'r lle sydd wedi'i neilltuo ar gyfer y gynulleidfa yn mesur 240 m<sup>2</sup>.

Dylid cael uchafswm o 1.5 o bobl fesul metr sgwâr.

Mae'n costio £1150 i drefnu cyngerdd

Mae'r tocynnau yn costio £9 yr un.

Mae'r nifer uchaf a ganiateir o bobl yn prynu tocynnau.

Faint o arian sydd yn weddill ar ôl talu am y gost o drefnu'r cyngerdd?

A	£2190	
B	£2090	
C	£310	
D	£290	

10. The organisers of a concert measure the rate at which people can leave the building.

At one event, 150 people leave in 240 seconds.

What is the average exit rate per minute at this event?

A	37.5 people per minute
B	62.5 people per minute
C	90 people per minute
D	96 people per minute

10. Mae trefnwyr cyngerdd yn mesur pa mor gyflym y mae pobl yn gallu gadael yr adeilad.

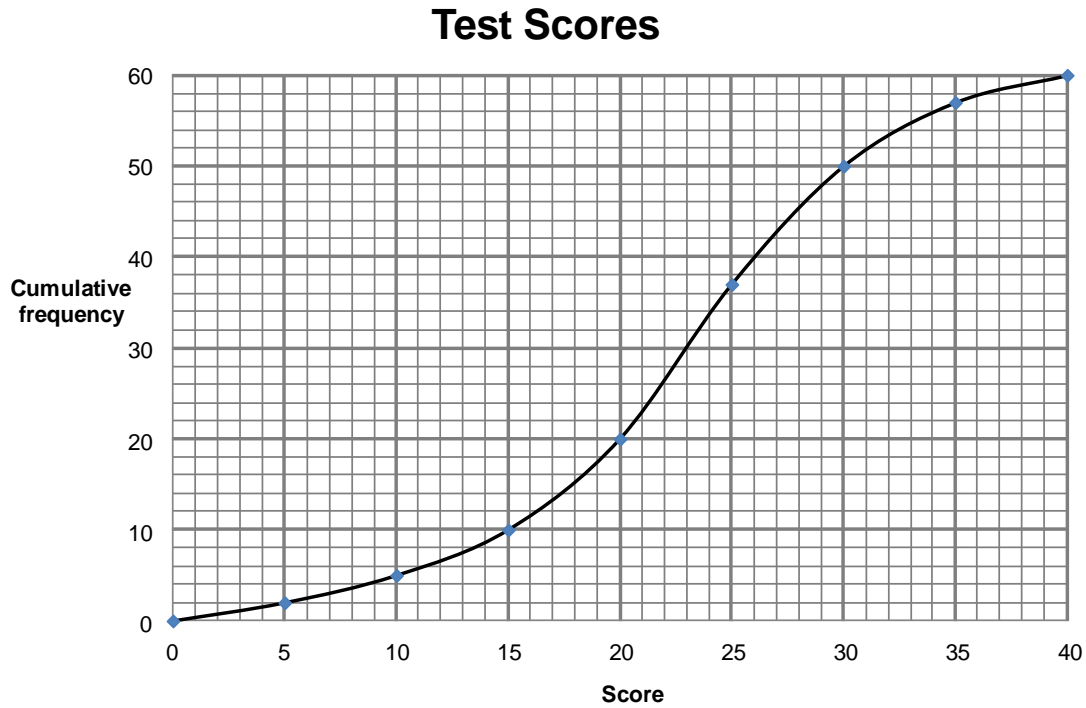
Yn un digwyddiad, mae 150 o bobl yn gadael mewn 240 eiliad.

Beth yw'r gyfradd gadael fesul munud ar gyfer y digwyddiad hwn ar gyfartaledd?

A	37.5 o bobl y funud	
B	62.5 o bobl y funud	
C	90 o bobl y funud	
D	96 o bobl y funud	

Questions 11 to 13 are about a test.

11. This graph shows the score obtained in a test by 60 students. The test had a top mark of 40



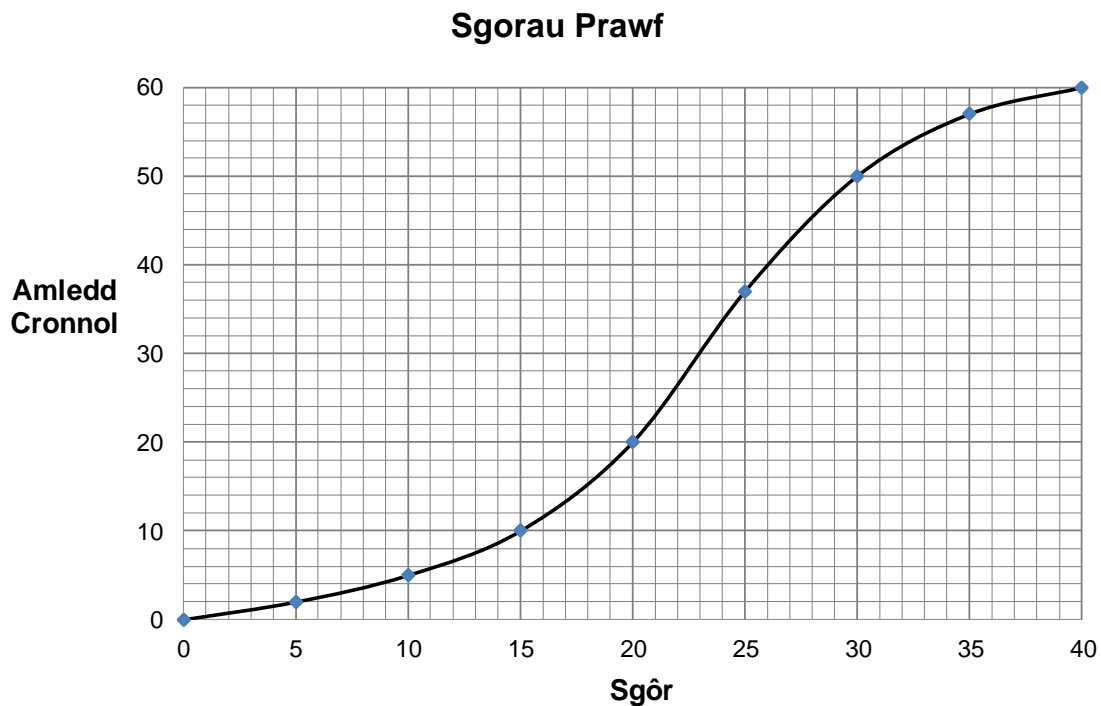
Which is closest to the median score?

A	20
B	21
C	23
D	24



Mae Cwestiynau 11 i 13 yn sôn am brawf.

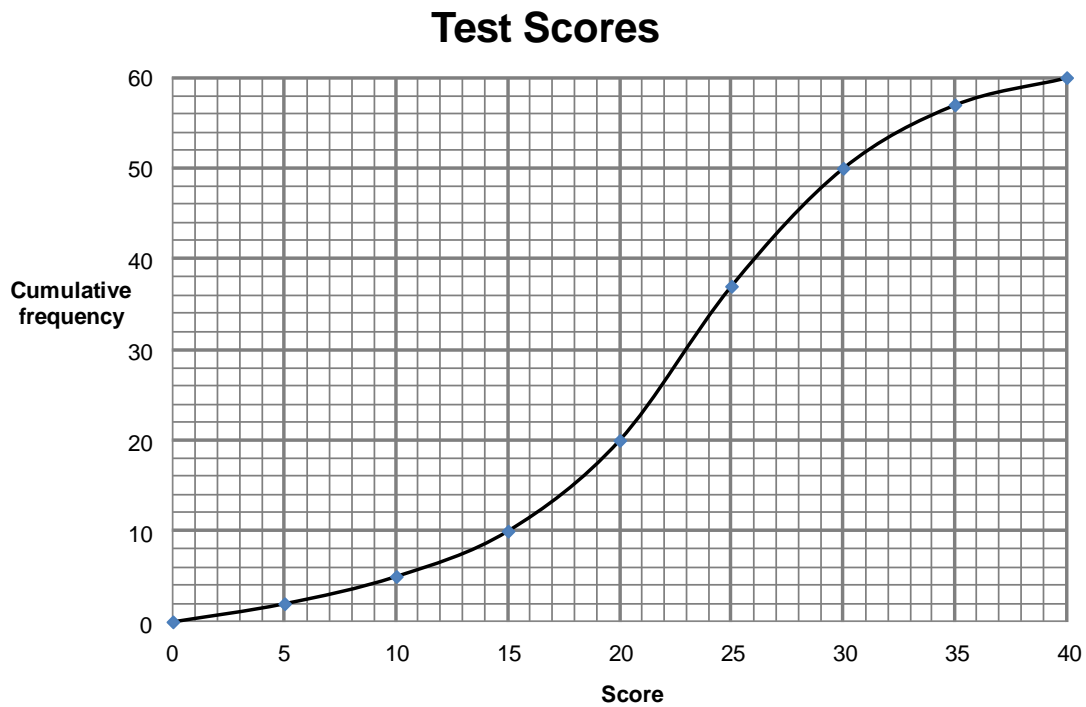
11. Mae'r graff hwn yn dangos beth oedd sgôr 60 o fyfyrwyr mewn prawf. Y marc uchaf ar gyfer y prawf oedd 40.



Pa un o'r canlynol sydd agosaf at y sgôr canolrifol?

A	20	
B	21	
C	23	
D	24	

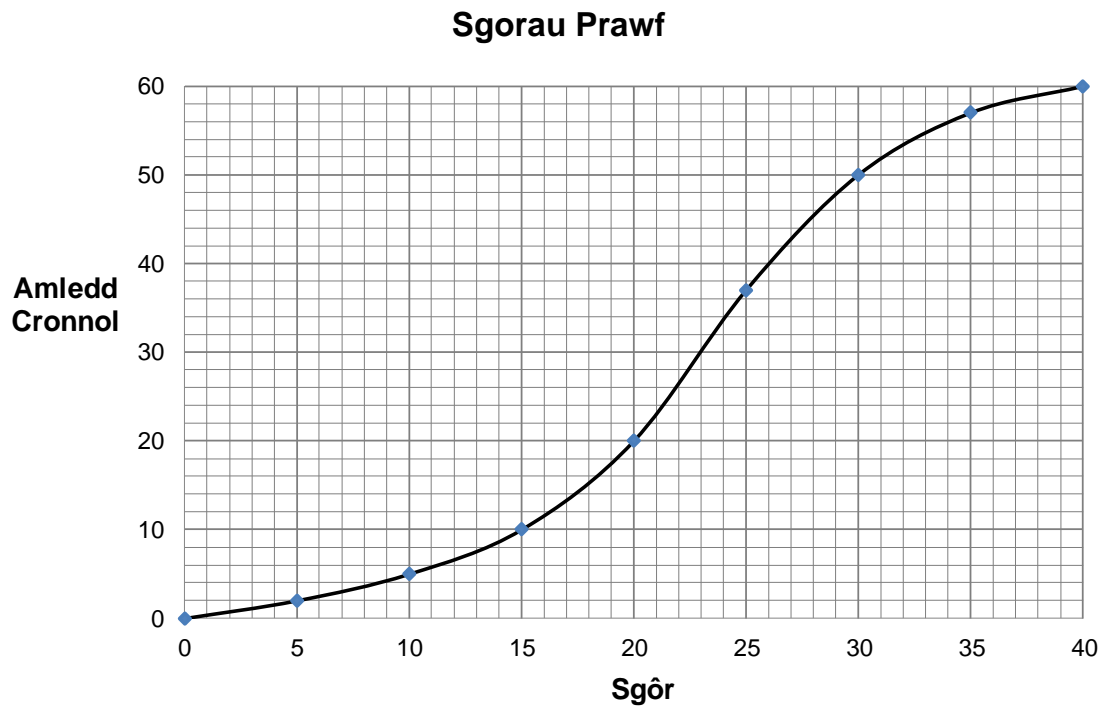
12. This graph shows the score obtained in a test by 60 students. The test had a top mark of 40.



Which one of the following is closest to the interquartile range of the scores?

A	6
B	10
C	20
D	30

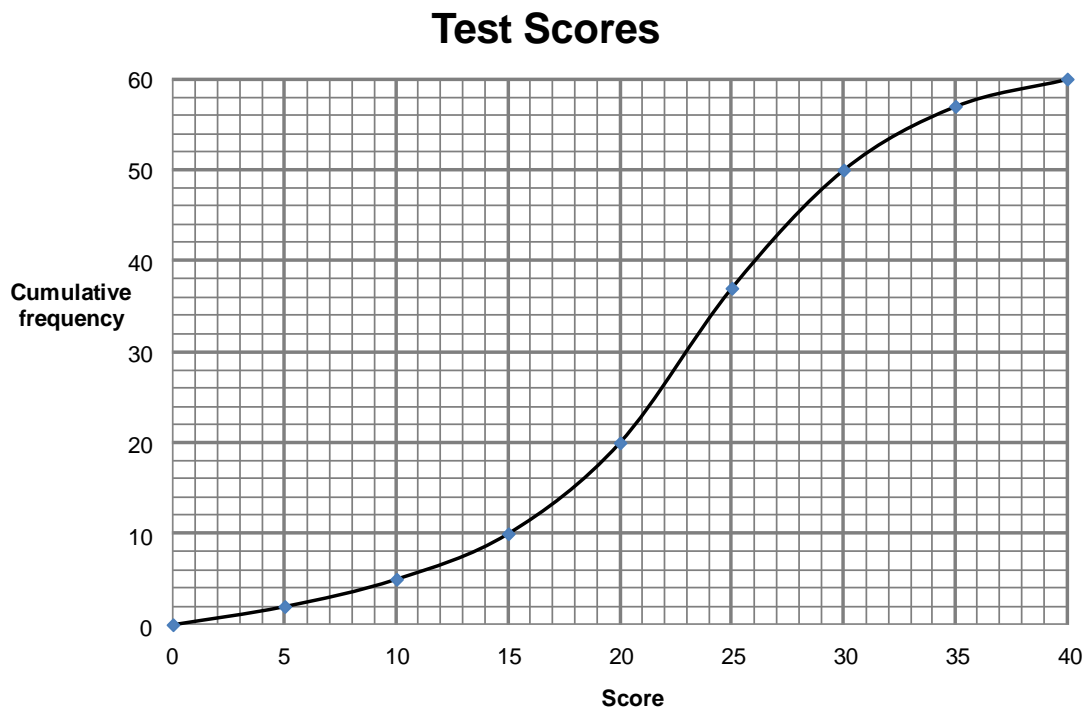
12. Mae'r graff hwn yn dangos beth oedd sgôr 60 o fyfyrwyr mewn prawf. Y marc uchaf ar gyfer y prawf oedd 40.



Pa un o'r rhain sydd agosaf at amrediad rhyngchwartel y sgorau?

A	6	
B	10	
C	20	
D	30	

13. This graph shows the score obtained in a test by 60 students. The test had a top mark of 40.

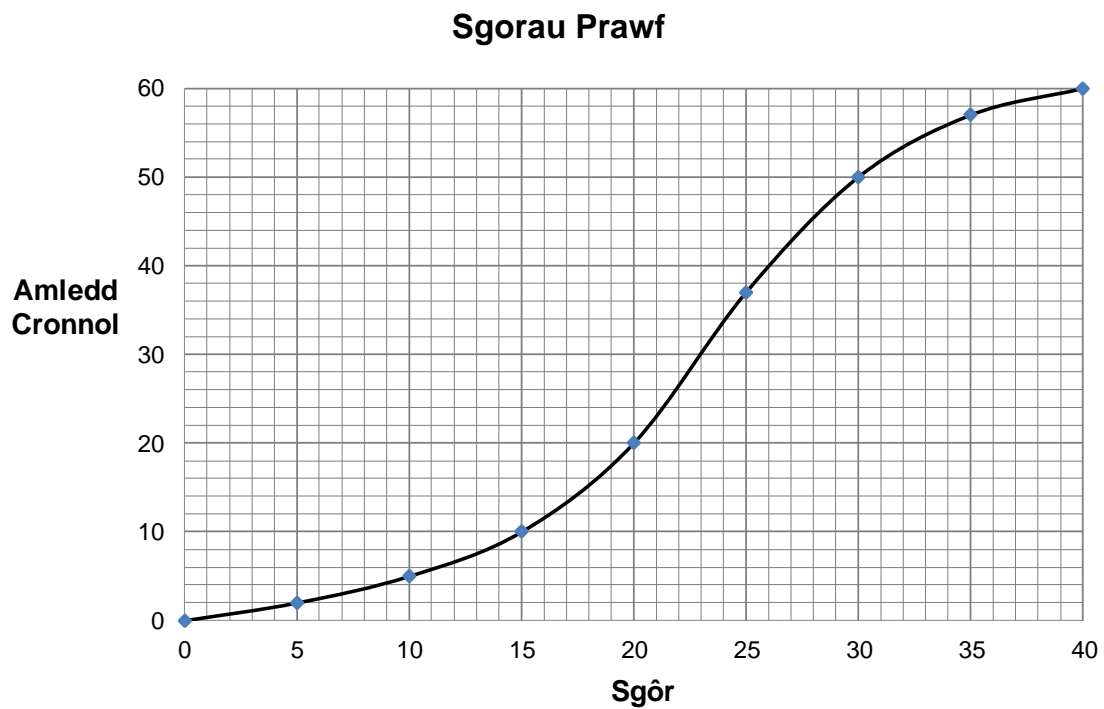


Students that scored over 25 marks passed the test.

What percentage of students passed the test, to the nearest percent?

A	25%
B	38%
C	58%
D	62%

13. Mae'r graff hwn yn dangos beth oedd sgôr 60 o fyfyrwyr mewn prawf. Y marc uchaf ar gyfer y prawf oedd 40.



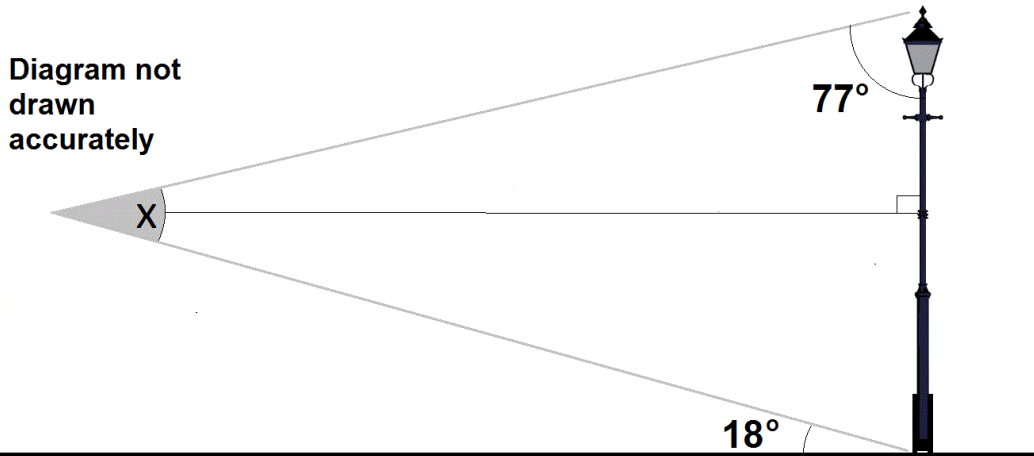
Roedd pob myfyriwr oedd yn sgorio dros 25 marc yn llwyddo yn y prawf.

Pa ganran o'r myfyrwyr oedd wedi llwyddo yn y prawf, i'r canran agosaf?

A	25%	
B	38%	
C	58%	
D	62%	

Questions 14 to 15 are about a street lamp.

14. A lamp post is viewed from a distance and some angles are measured. This diagram shows the angles.

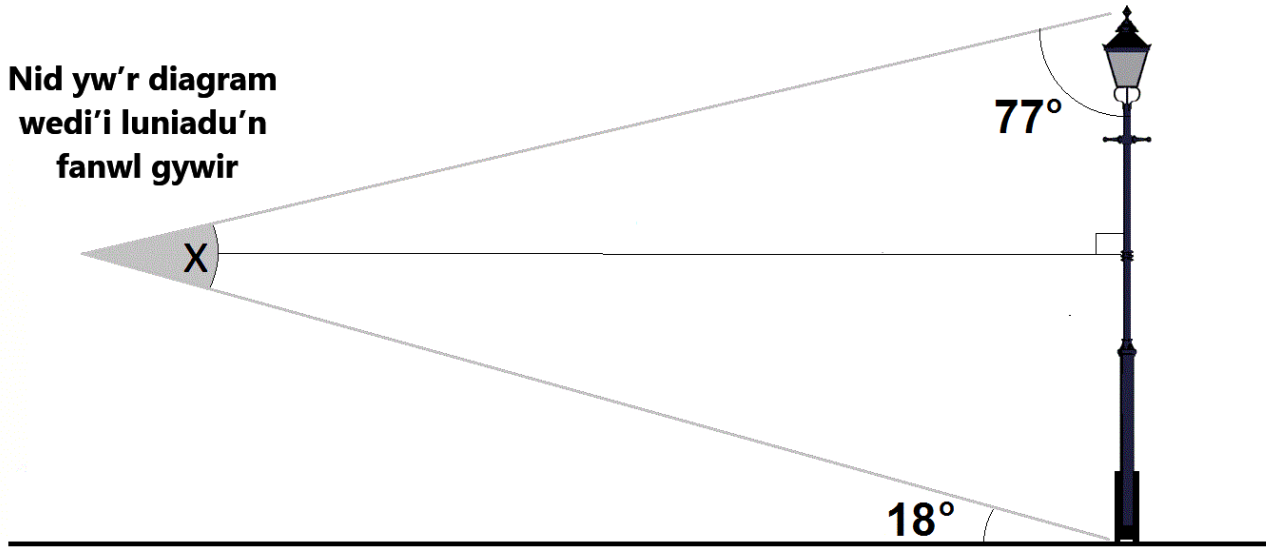


What is the size of angle  $X$ ?

A	59 degrees
B	41 degrees
C	31 degrees
D	21 degrees

**Mae Cwestiynau 14 i 15 yn sôn am lamp stryd.**

14. Mae rhywun yn edrych ar bolyn lamp o bell ac mae rhai onglau yn cael eu mesur. Mae'r diagram hwn yn dangos yr onglau.



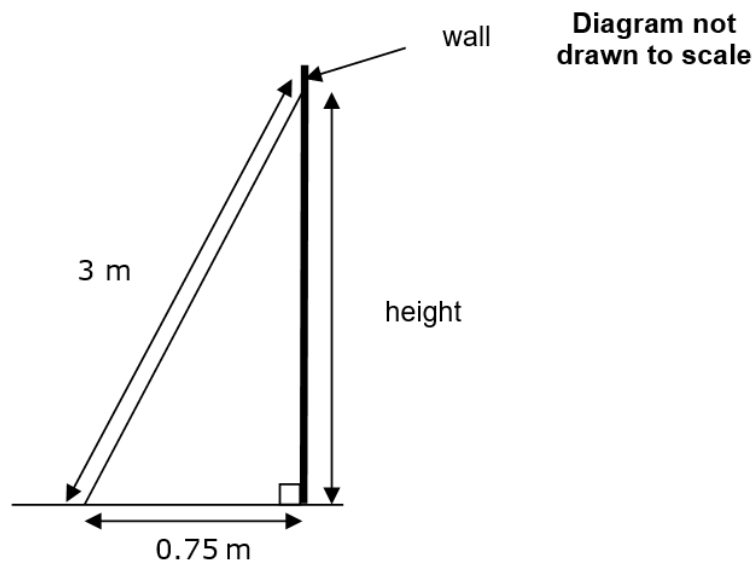
Beth yw maint ongl  $X$ ?

A	59 gradd	
B	41 gradd	
C	31 gradd	
D	21 gradd	

15. Another street lamp is fixed to a building.

The foot of a ladder is placed 0.75 m from the base of the building.

The ladder is 3 m long



Which calculation gives the height of the point at which the ladder touches the wall?

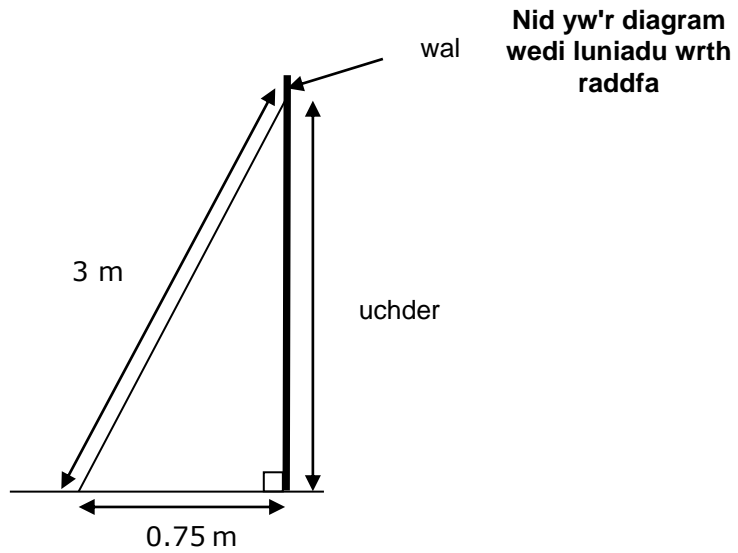
A	$\sqrt{3^2 + 0.75^2}$
B	$\sqrt{3 - 0.75}$
C	$\sqrt{3 + 0.75}$
D	$\sqrt{3^2 - 0.75^2}$



15. Mae lamp stryd arall yn cael ei gosod ar adeilad.

Mae troed ysgol yn cael ei gosod 0.75m o waelod yr adeilad.

Mae'r ysgol yn 3m o hyd



Pa un o'r cyfrifiadau isod sy'n dangos ar ba uchder y mae'r ysgol yn cyffwrdd y wal?

A	$\sqrt{3^2 + 0.75^2}$	
B	$\sqrt{3 - 0.75}$	
C	$\sqrt{3 + 0.75}$	
D	$\sqrt{3^2 - 0.75^2}$	

Questions 16 to 18 are about ventilation systems.

16. This formula is used to find the size of a ventilation fan for a room.

$$F = \frac{V A}{60}$$

F = fan size (m<sup>3</sup>/min)

V = volume of room (m<sup>3</sup>)

A = air changes per hour

A fan of size 7 m<sup>3</sup> is used in a room with a floor area of 25 m<sup>2</sup> and a height of 3 metres.

What is the number of air changes per hour?

A	1.25
B	5.2
C	5.6
D	8.75

**Mae Cwestiynau 16 i 18 yn sôn am systemau awyru.**

16. Dyma'r fformiwla sy'n cael ei defnyddio i ganfod maint ffan awyru ar gyfer ystafell.

$$F = \frac{VA}{60}$$

F = Maint y ffan ( $m^3$ /y funud)

V = Cyfaint yr ystafell ( $m^3$ )

A = nifer o weithiau mae'r aer yn newid bob awr

Mae ffan  $7m^3$  yn cael ei defnyddio mewn ystafell lle mae arwynebedd y llawr yn mesur  $25m^2$  ac sydd ag uchder o 3 metr.

Faint o weithiau mae'r aer yn newid bob awr?

A	1.25	
B	5.2	
C	5.6	
D	8.75	

17. A fan of size 3 m<sup>3</sup> per minute changes the air in a room 5 times per hour.

$$F = \frac{V A}{60}$$

F = fan size (m<sup>3</sup>/min)

V = volume of room (m<sup>3</sup>)

A = air changes per hour

What is the maximum volume of the room where the fan can be installed?

A	11.4 m <sup>3</sup>
B	12.6 m <sup>3</sup>
C	30.0 m <sup>3</sup>
D	36.0 m <sup>3</sup>

17. Mae ffan sy'n troi ar  $3 \text{ m}^3$  y funud yn newid yr aer mewn ystafell 5 gwaith yr awr.

$$F = \frac{VA}{60}$$

F = Maint y ffan ( $\text{m}^3/\text{y funud}$ )

V = Cyfaint yr ystafell ( $\text{m}^3$ )

A = nifer o weithiau mae'r aer yn newid bob awr

Beth yw cyfaint mwyaf yr ystafell lle gellir gosod y ffan?

A	$11.4 \text{ m}^3$	
B	$12.6 \text{ m}^3$	
C	$30.0 \text{ m}^3$	
D	$36.0 \text{ m}^3$	

18. A busy kitchen has a ventilation fan.

The capacity of the fan is 700 cubic feet per minute ( $\text{ft}^3/\text{min}$ ).

Use this information:

$$1 \text{ m}^3 = 35 \text{ ft}^3$$

What is the capacity of the fan in cubic metres per hour ( $\text{m}^3/\text{h}$ )?

A	2 100 $\text{m}^3/\text{h}$
B	1 200 $\text{m}^3/\text{h}$
C	408 $\text{m}^3/\text{h}$
D	333 $\text{m}^3/\text{h}$

18. Mae ffan awyru mewn cegin brysur.

700 troedfedd giwbig y funud ( $\text{ft}^3/\text{min}$ ) yw cynhwysedd y ffan.

Defnyddiwch y wybodaeth ganlynol:

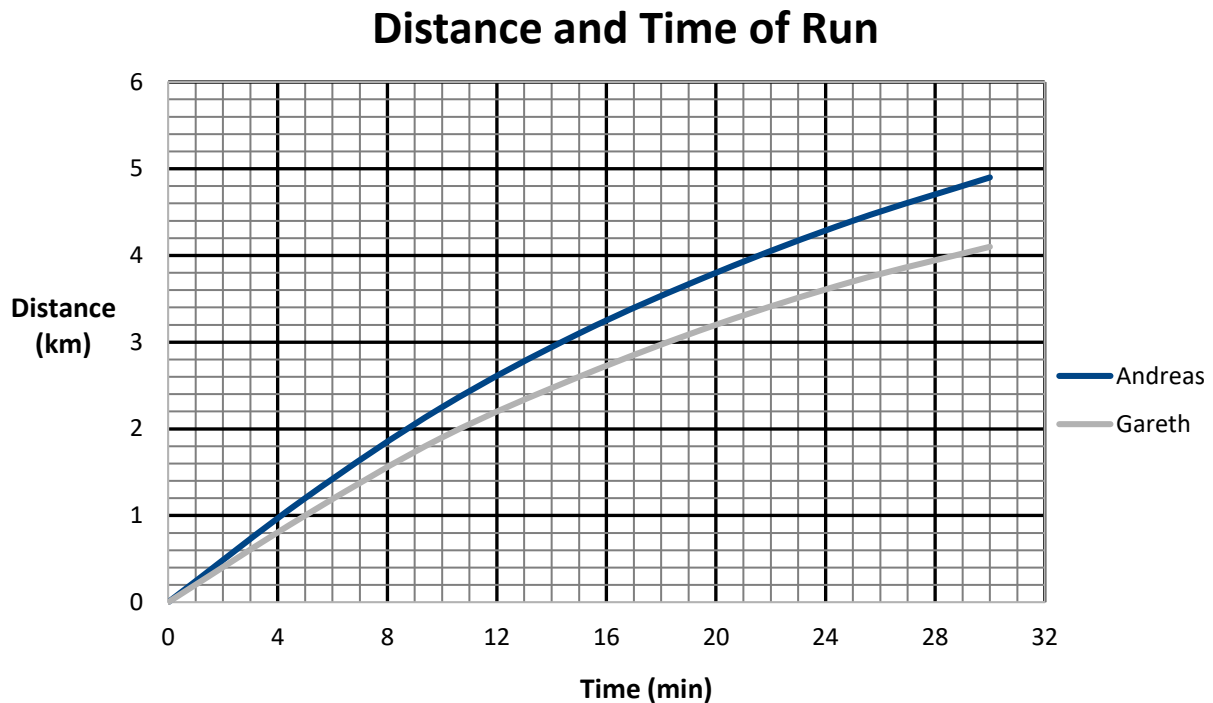
$$1 \text{ m}^3 = 35 \text{ ft}^3$$

Beth yw cynhwysedd y ffan mewn metrau ciwbig yr awr ( $\text{m}^3/\text{h}$ )?

A	2100 $\text{m}^3/\text{h}$	
B	1200 $\text{m}^3/\text{h}$	
C	408 $\text{m}^3/\text{h}$	
D	333 $\text{m}^3/\text{h}$	

Questions 19 to 21 are about running.

19. Andreas and Gareth go running for 30 minutes. This graph shows the distance they had covered over time.



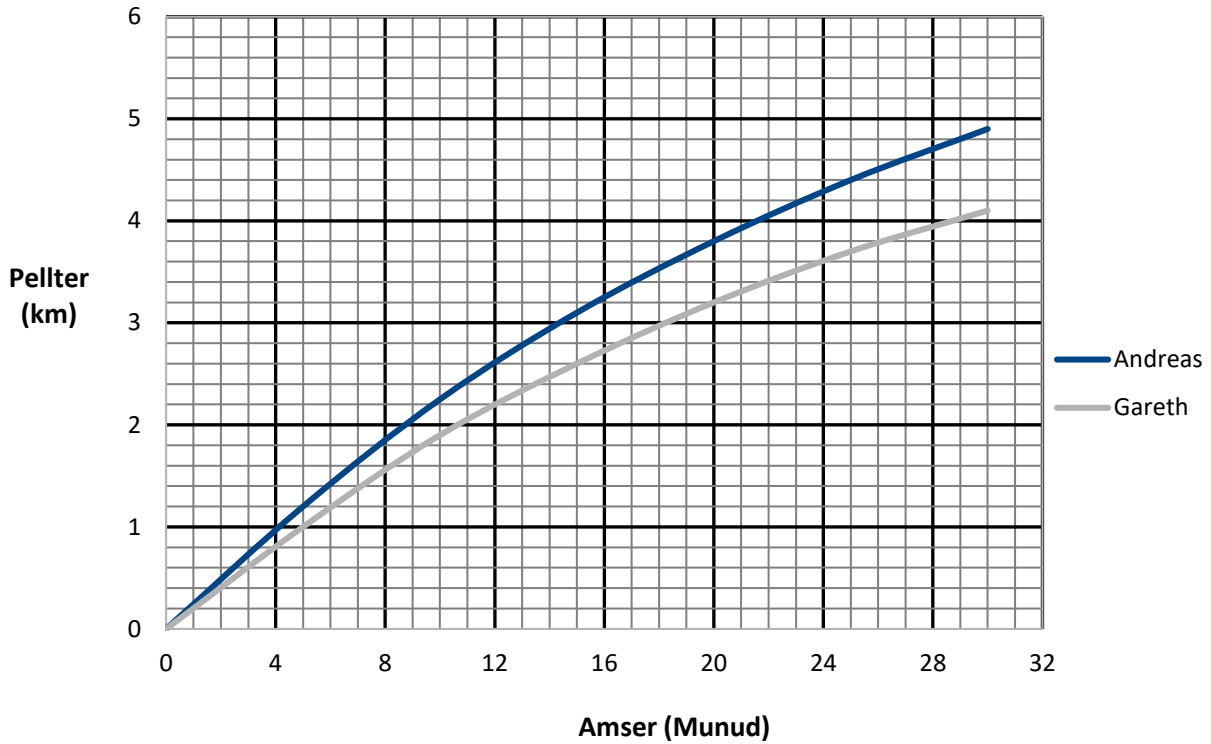
What was the distance between the runners after a quarter of an hour?

A	50 metres
B	250 metres
C	500 metres
D	2500 metres

**Mae Cwestiynau 19 i 21 yn sôn am redeg.**

19. Mae Andreas a Gareth yn mynd i redeg am 30 munud. Mae'r graff yn dangos pa mor bell yr oeddynt wedi rhedeg dros amser.

**Pellter ac Amser Rhedeg**



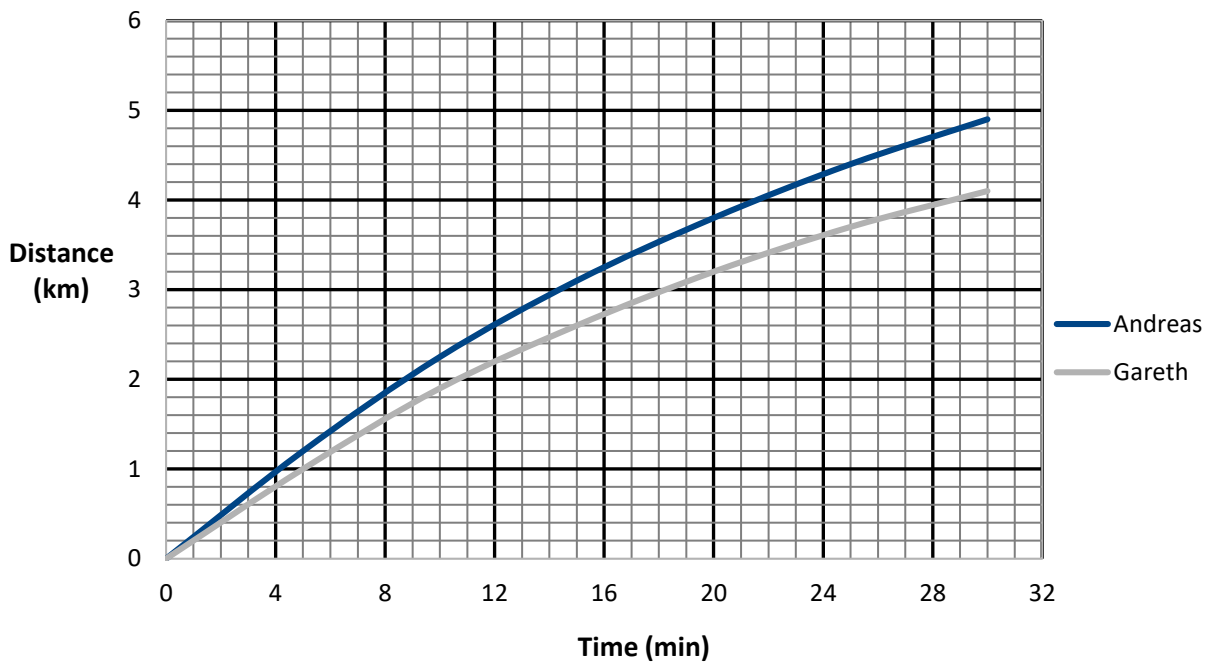
Beth oedd y pellter rhwng y rhedwyr ar ôl chwarter awr?

A	50 metr	
B	250 metr	
C	500 metr	
D	2500 metr	



20. Andreas and Gareth go running for 30 minutes. This graph shows the distance they had covered over time.

### Distance and Time of Run

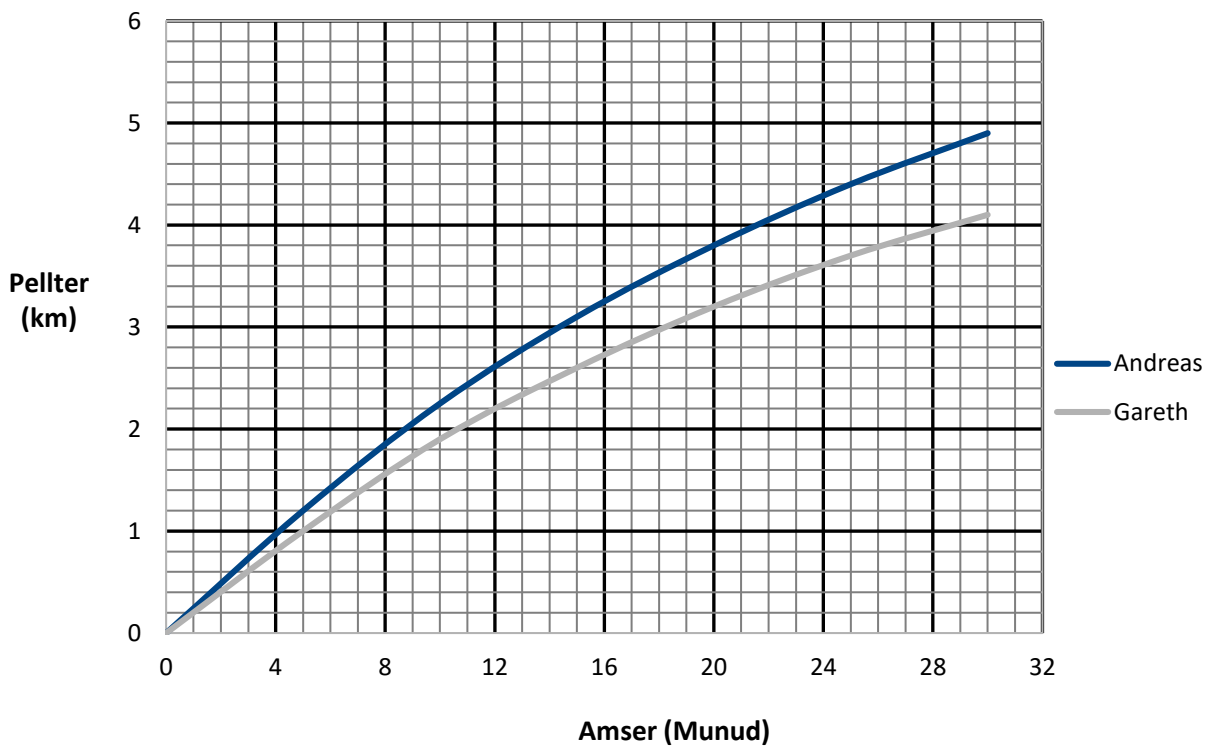


What was Andreas' average speed for the run?

A	13.0 km/h
B	11.4 km/h
C	9.8 km/h
D	2.45 km/h

20. Mae Andreas a Gareth yn mynd i redeg am 30 munud. Mae'r graff yn dangos pa mor bell yr oeddynt wedi rhedeg dros amser.

### Pellter ac Amser Rhedeg

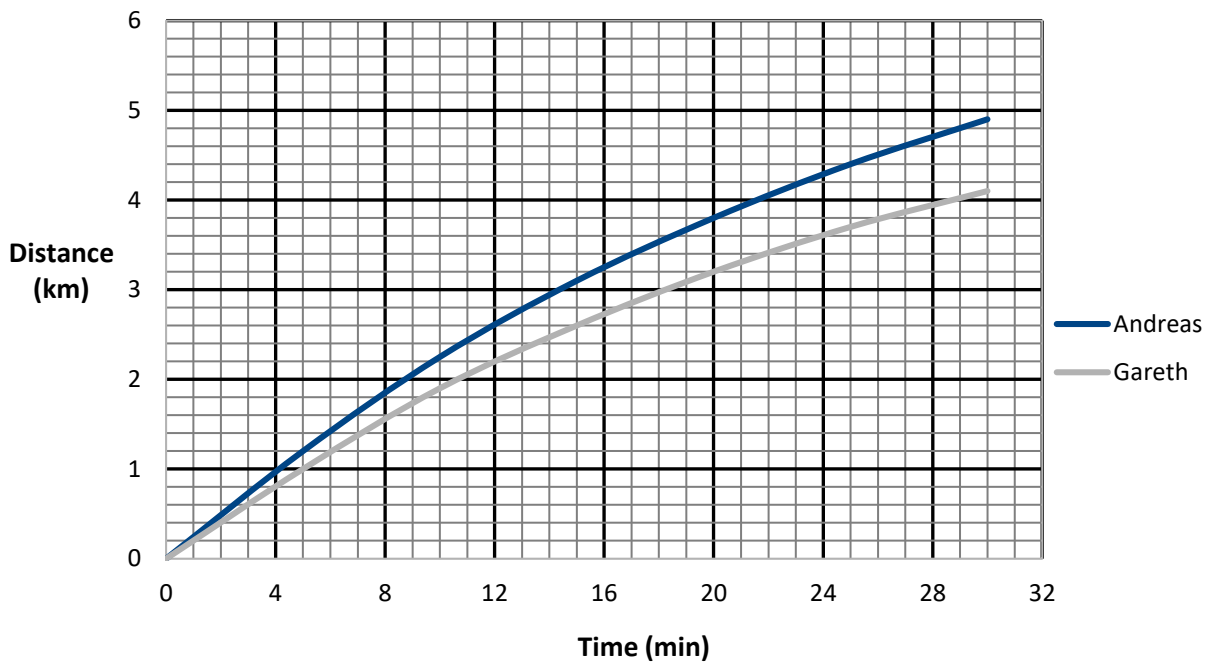


Beth oedd cyfartaledd cyflymder Andreas?

A	13.0 km/h	
B	11.4 km/h	
C	9.8 km/h	
D	2.45 km/h	

21. Andreas and Gareth go running for 30 minutes. This graph shows the distance they had covered over time.

### Distance and Time of Run

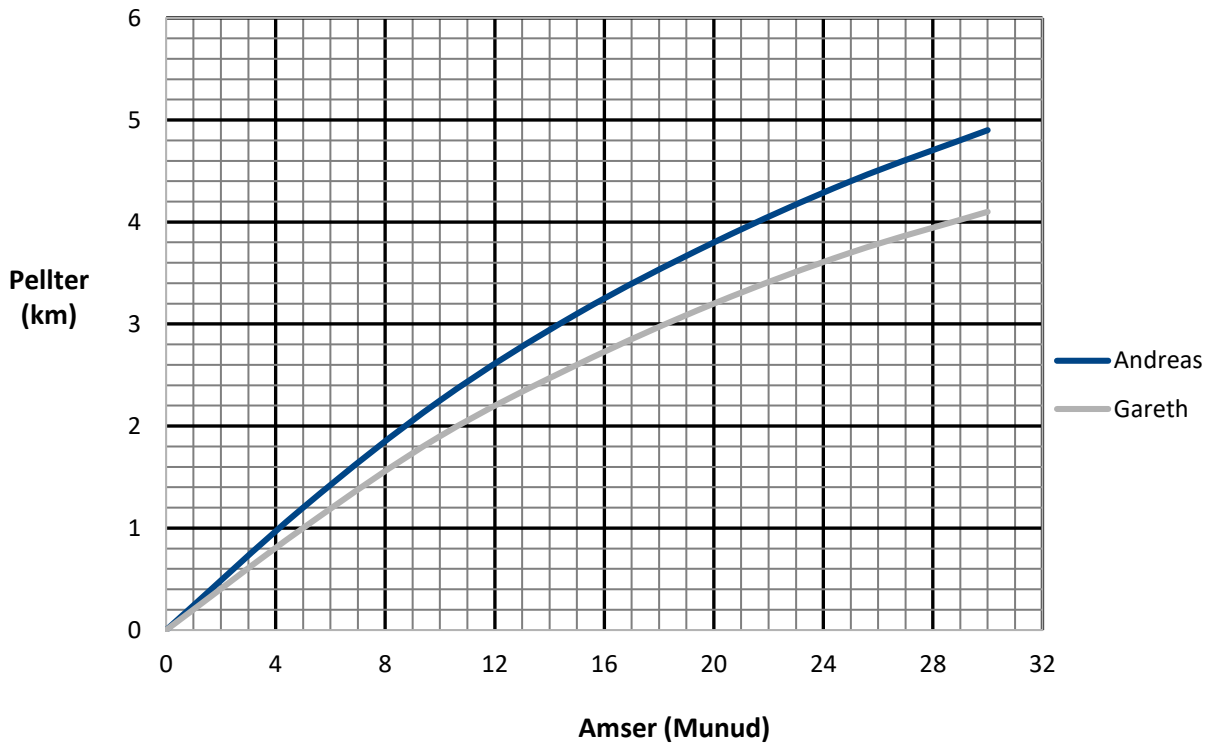


What was Gareth's average speed over the first kilometre, in metres per second?

A	0.3 m/s
B	3.3 m/s
C	12.0 m/s
D	16.7 m/s

21. Mae Andreas a Gareth yn mynd i redeg am 30 munud. Mae'r graff yn dangos pa mor bell yr oeddynt wedi rhedeg dros amser.

### Pellter ac Amser Rhedeg



Beth oedd cyfartaledd cyflymder Gareth dros y cilometr cyntaf, mewn metrau yr eiliad?

A	0.3 m/s	
B	3.3 m/s	
C	12.0 m/s	
D	16.7 m/s	

**Questions 22 to 24 are about blood groups.**

22. In the UK 3% of the population has blood group AB positive.

The population of the UK is  $6.4 \times 10^7$

How many people in the UK have the blood group AB positive?

A	$1.92 \times 10^6$
B	$1.92 \times 10^7$
C	$2.13 \times 10^6$
D	$2.13 \times 10^7$

**Mae Cwestiynau 22 i 24 yn sôn am grwpiau gwaed.**

22. Yn y DU, AB positif yw grŵp gwaed 3% o'r boblogaeth.

$6.4 \times 10^7$  yw poblogaeth y DU.

Faint o bobl yn y DU sydd â'r grŵp gwaed AB positif?

A	$1.92 \times 10^6$	
B	$1.92 \times 10^7$	
C	$2.13 \times 10^6$	
D	$2.13 \times 10^7$	

23. There are 1.28 million people in the UK with blood group B negative.

The population of the UK is  $6.4 \times 10^7$

What is the proportion of people in the UK with blood group B negative?

A	1 in 5
B	1 in 8
C	1 in 50
D	1 in 80

23. Yn y DU, B negatif yw grŵp gwaed 1.28 miliwn o bobl.

$6.4 \times 10^7$  yw poblogaeth y DU.

Pa gyfran o bobl y DU sydd â'r grŵp gwaed B negatif?

A	1 ym mhob 5	
B	1 ym mhob 8	
C	1 ym mhob 50	
D	1 ym mhob 80	

24. The number of people in the UK with blood group A negative is  $4.48 \times 10^6$

The population of the UK is  $6.4 \times 10^7$

What percentage of the population has blood group A negative?

A	14.3 %
B	7.0 %
C	1.43 %
D	0.7 %

24. Nifer y bobl yn y DU sydd â grŵp gwaed A negatif yw  $4.48 \times 10^6$

$6.4 \times 10^7$  yw poblogaeth y DU.

Pa ganran o'r boblogaeth sydd â grŵp gwaed A negatif?

A	14.3 %	
B	7.0 %	
C	1.43 %	
D	0.7 %	

**Questions 25 to 26 are about telephone call charges.**

25. A telephone call starts at 09:57:30 and ends at 11:23:20

Each part minute is rounded up to the next whole minute.

Calls cost 25 pence per minute.

How much does the call cost?

A	£18.75
B	£21.25
C	£21.50
D	£31.25

**Mae Cwestiynau 25 i 26 yn sôn am gost galwadau ffôn.**

25. Mae galwad ffôn yn dechrau am 09:57:30 ac yn gorffen am 11:23:20

Mae pob munud rhannol yn cael ei dalgrynnu i'r munud cyfan nesaf.

Mae galwadau yn costio 25 ceiniog y funud.

Faint mae'r alwad yn ei gostio?

A	£18.75	
B	£21.25	
C	£21.50	
D	£31.25	



26. A telephone bill is made up of a fixed monthly fee plus 25 pence per minute for calls made.

In 3 months, exactly 4 hours of calls are made. The total bill for the 3 months is £105

What is the fixed fee per month?

A	£15.00
B	£20.00
C	£28.33
D	£45.00

26. Mae bil ffôn yn cynnwys ffi fisol benodedig a 25 ceiniog y funud am bob galwad sy'n cael ei gwneud.

Mewn 3 mis, mae 4 awr union o alwadau yn cael eu gwneud. Cyfanswm y bil am y 3 mis yw £105

Beth yw'r ffi benodedig bob mis?

A	£15.00	
B	£20.00	
C	£28.33	
D	£45.00	

**Questions 27 to 30 are about a scale model.**

27. A model of a new office block is required by an architect. The height of the actual building is 44 metres.

The scale of the model will be 1 : 200

What is the height of the model in mm?

A	22 mm
B	88 mm
C	220 mm
D	880 mm

**Mae Cwestiynau 27 i 30 yn sôn am fodel wrth raddfa.**

27. Mae pensaer angen model o floc swyddfeydd newydd. Mae'r adeilad go iawn yn 44 metr o uchder.

Graddfa'r model fydd 1: 200

Beth yw uchder y model mewn mm?

A	22 mm	
B	88 mm	
C	220 mm	
D	880 mm	

28. A flower bed on the model will be 6 inches long.

The scale of the model will be 1 : 200

**1 inch = 2.5 centimetres**

What is the length of the actual flower bed?

A	24 m
B	30 m
C	48 m
D	300 m

28. Bydd gwely blodau ar y model yn mesur 6 modfedd o hyd.

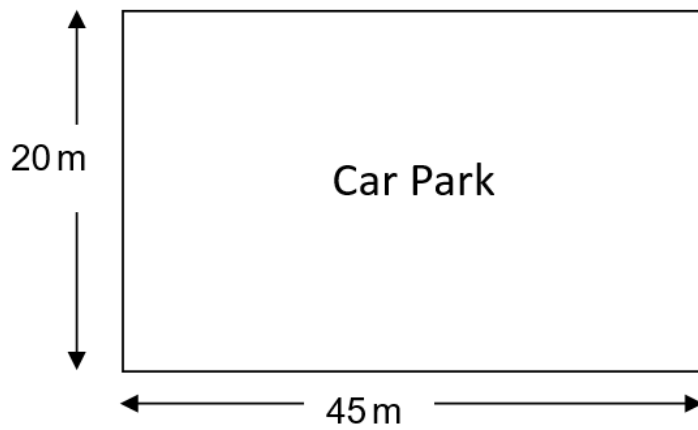
Graddfa'r model fydd 1: 200

**1 modfedd = 2.5 centimetr**

Beth fydd hyd y gwely blodau go iawn?

A	24 m	
B	30 m	
C	48 m	
D	300 m	

29. The area of the actual car park is  $900 \text{ m}^2$



**Diagram not  
drawn to scale**

The scale of the model will be 1 : 200

What is the area of the car park on the model?

A	$4.5 \text{ cm}^2$
B	$22.5 \text{ cm}^2$
C	$45 \text{ cm}^2$
D	$225 \text{ cm}^2$

29. Arwynebedd y maes parcio go iawn yw  $900 \text{ m}^2$



Nid yw'r diagram wedi luniadu wrth raddfa

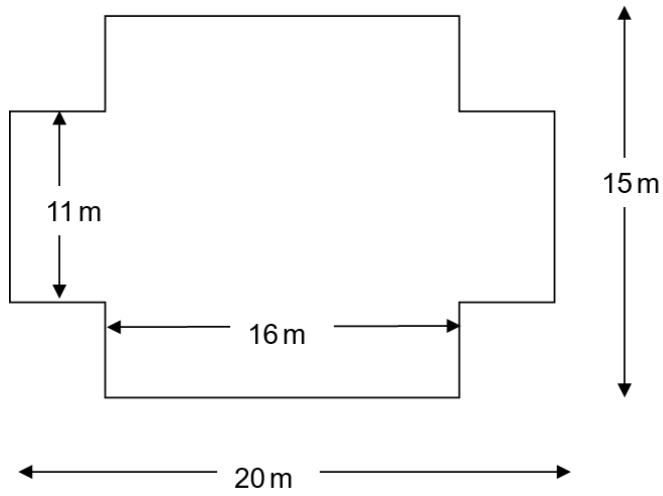
Graddfa'r model fydd 1: 200

Beth yw arwynebedd y maes parcio ar y model?

A	$4.5 \text{ cm}^2$	
B	$22.5 \text{ cm}^2$	
C	$45 \text{ cm}^2$	
D	$225 \text{ cm}^2$	

30. This is the plan of a floor of the office block.

**Diagram not  
drawn to scale**

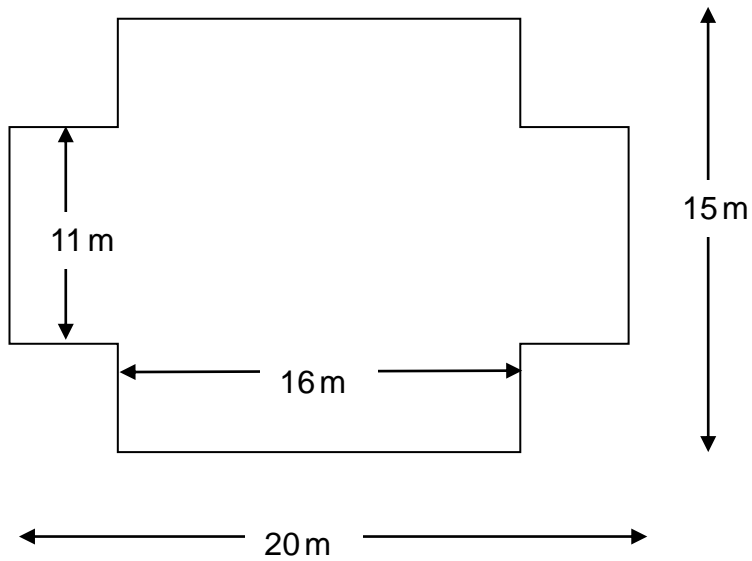


What is the area of the floor?

A	236 m <sup>2</sup>
B	262 m <sup>2</sup>
C	284 m <sup>2</sup>
D	460 m <sup>2</sup>

30. Dyma gynllun o lawr yn y bloc swyddfa.

**Nid yw'r  
diagram wedi'i  
luniadu wrth  
raddfa**



Beth yw arwynebedd y llawr?

A	236 m <sup>2</sup>	
B	262 m <sup>2</sup>	
C	284 m <sup>2</sup>	
D	460 m <sup>2</sup>	