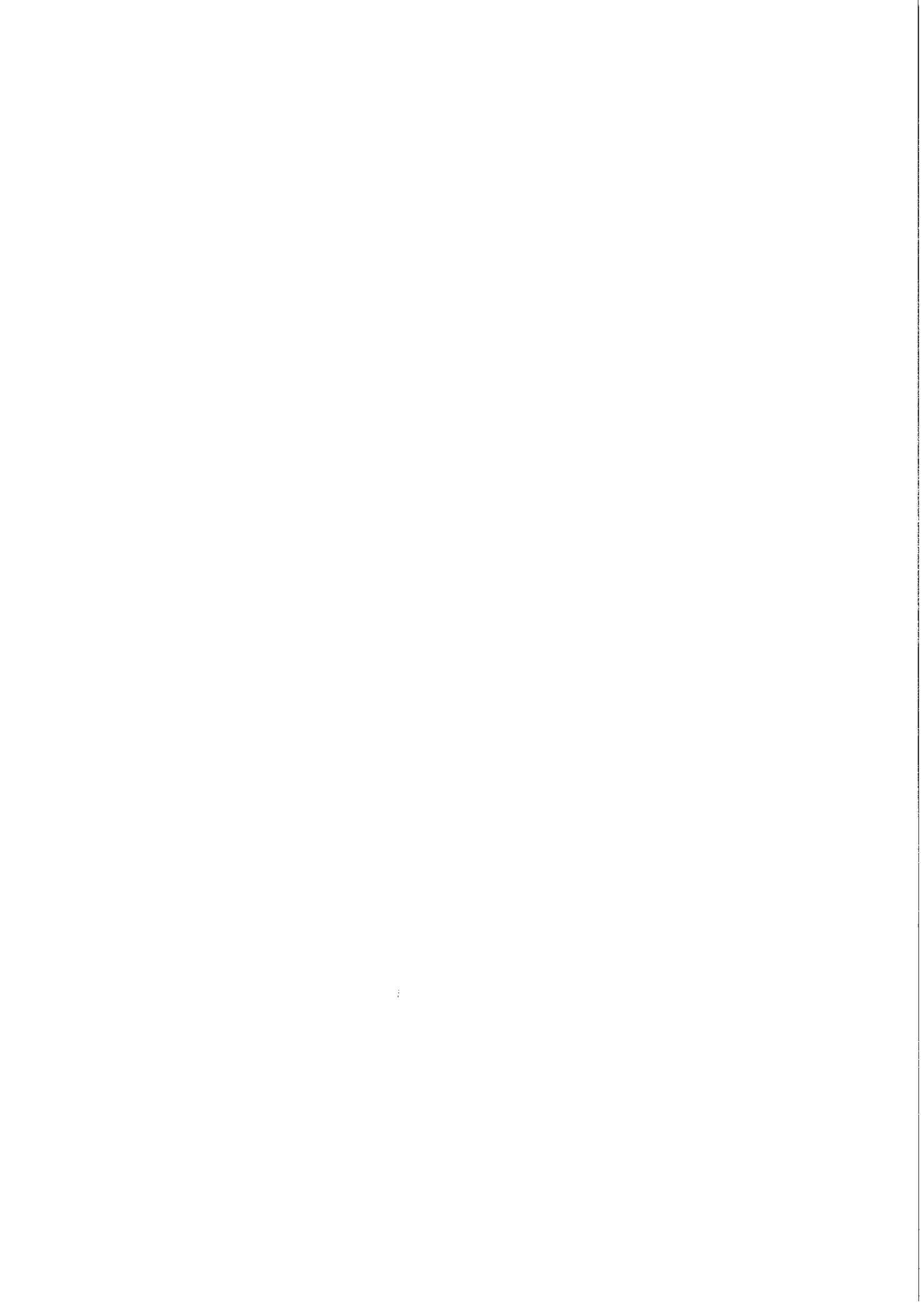


# The UCL Academy

## GCSE Mathematics

### Easter Maths Mock Revision Booklet 2

Chapter	Topic Test No.	Topic	Done?
7	Topic Test 16	Basic Algebra	
7	Topic Test 17	Basic Algebra	
7	Topic Test 18	Basic Algebra	
8	Topic Test 19	Properties of polygons	
9	Topic Test 20	Properties of polygons	
9	Topic Test 21	Properties of polygons	
9	Topic Test 22	Properties of polygons	
10	Topic Test 23	Angles	
10	Topic Test 24	Angles	
10	Topic Test 25	Angles	
11 & 12	Topic Test 26	Perimeter and Area	
11 & 12	Topic Test 27	Perimeter and Area	
11 & 12	Topic Test 28	Circumference and Area	
13	Topic Test 29	Rounding to decimal places	
13	Topic Test 30	Rounding to significant figures	



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# Topic Test 16 (20 minutes)

## Basic algebra – Non-calculator

---

1 Work out the value of  $24 + 4 \times 3^2$

[1 mark]

Answer \_\_\_\_\_

2 (a) Simplify  $6 \times 2 \times d \times d \times e$

[1 mark]

Answer \_\_\_\_\_

2 (b) Write as a single fraction in its simplest form  $(5 \times g \times g \times g) \div (8 \times h \times h)$

[2 marks]

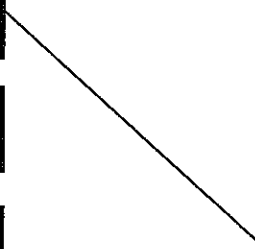
Answer \_\_\_\_\_

3 Match each card on the left with a card on the right.

The first one is done for you.

[2 marks]

5 more than $n$	$n - 5$
Double $n$	$2n + 1$
5 less than $n$	$n + 5$
$n$ squared	$2(n + 1)$
Double $n$ then add 1	$n^2$
Add 1 then double the answer	$2n$



4 Andrew pays  $\pounds p$  for his phone.  
Liz pays 3 times as much as Andrew.  
Laura pays  $\pounds 20$  less than Liz.

Write an expression for the total they pay.

Simplify your answer.

[3 marks]

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Answer  $\pounds$  \_\_\_\_\_

---

5 Factorise fully each of the following expressions

5 (a)  $20a + 16$

[1 mark]

Answer \_\_\_\_\_

5 (b)  $30b - 45$

[1 mark]

Answer \_\_\_\_\_

5 (c)  $16c^3 + 24c$

[2 marks]

Answer \_\_\_\_\_

5 (d)  $18d^3e - 27d^5e$

[2 marks]

Answer \_\_\_\_\_

**END OF QUESTIONS**



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# Topic Test 17 (20 minutes)

## Basic algebra – Non-calculator

---

- 1 Work out the value of  $3 + 4^2 - 20 + 5$

[2 marks]

---

---

Answer \_\_\_\_\_

- 2 Insert brackets in the following to make it correct

[1 mark]

$$3 \times 4 + 2 \div 8 - 2 = 3$$

- 3 George says that  $4 + a + a + a + b + b = 24ab$

Describe the mistakes George has made.

Give the correct answer.

[2 marks]

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Answer \_\_\_\_\_

- 
- 4 On Monday David travels  $m$  miles.  
On Tuesday he travels 35 miles more than he did on Monday.  
On Wednesday he travels a total of twice the distance he travelled on Monday.
- Work out an expression for the total distance he travels during the three days.

[3 marks]

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Answer \_\_\_\_\_ miles

- 5 Multiply out  $7(3a + 8)$

[2 marks]

---

Answer \_\_\_\_\_



---

6 Expand and simplify

6 (a)  $4(5h + 7) + 2(5h - 7)$

[3 marks]

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Answer \_\_\_\_\_

6 (b)  $9(3k + 1) - 5(2k - 4)$

[3 marks]

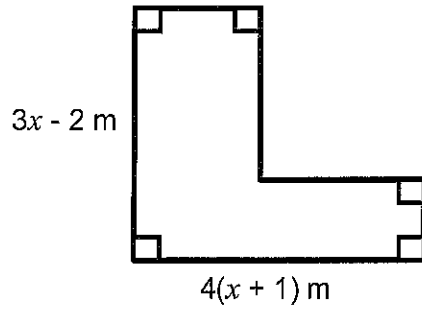
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Answer \_\_\_\_\_

7 A house has an open plan kitchen and lounge as shown.



Not drawn accurately

Work out an expression for the total perimeter of the shape.

[4 marks]

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---

Answer \_\_\_\_\_ m

---

**8** Factorise fully each of the following expressions

**(a)**  $10x + 15$

[1 mark]

Answer \_\_\_\_\_

**(b)**  $36x - 48$

[1 mark]

Answer \_\_\_\_\_

**(c)**  $27x + 45x^5$

[2 marks]

Answer \_\_\_\_\_

**(d)**  $44x^3y^2 - 33xy^4$

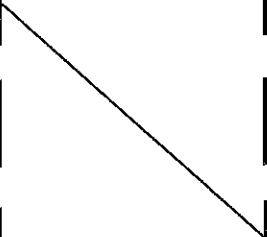
[2 marks]

Answer \_\_\_\_\_

- 9 Match each of the following by drawing a line.  
The first one has been done for you.

[2 marks]

$2n + 5 > 18$	Equation
$6(n - 5) = 42$	Expression
$w = 7h + 30$	Inequality
$5(n - 6)$	Formula
$4(n + 7) \equiv 4n + 28$	Identity



- 10 Write down all the integers,  $n$ , that satisfy the inequality

[2 marks]

$$-3 < n \leq 1$$

Answer \_\_\_\_\_

---

11 Sanjit wants to pick some strawberries.

He pays £3 for a box.

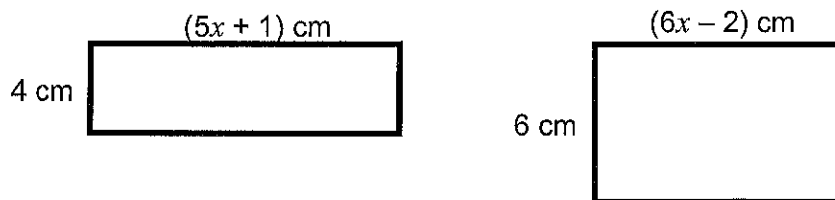
He then pays £1.20 per kg of strawberries.

Write down a formula to work out the total cost,  $C$ , of picking  $s$  kg of strawberries.

[1 mark]

Answer \_\_\_\_\_

12 These two rectangles have the same area.

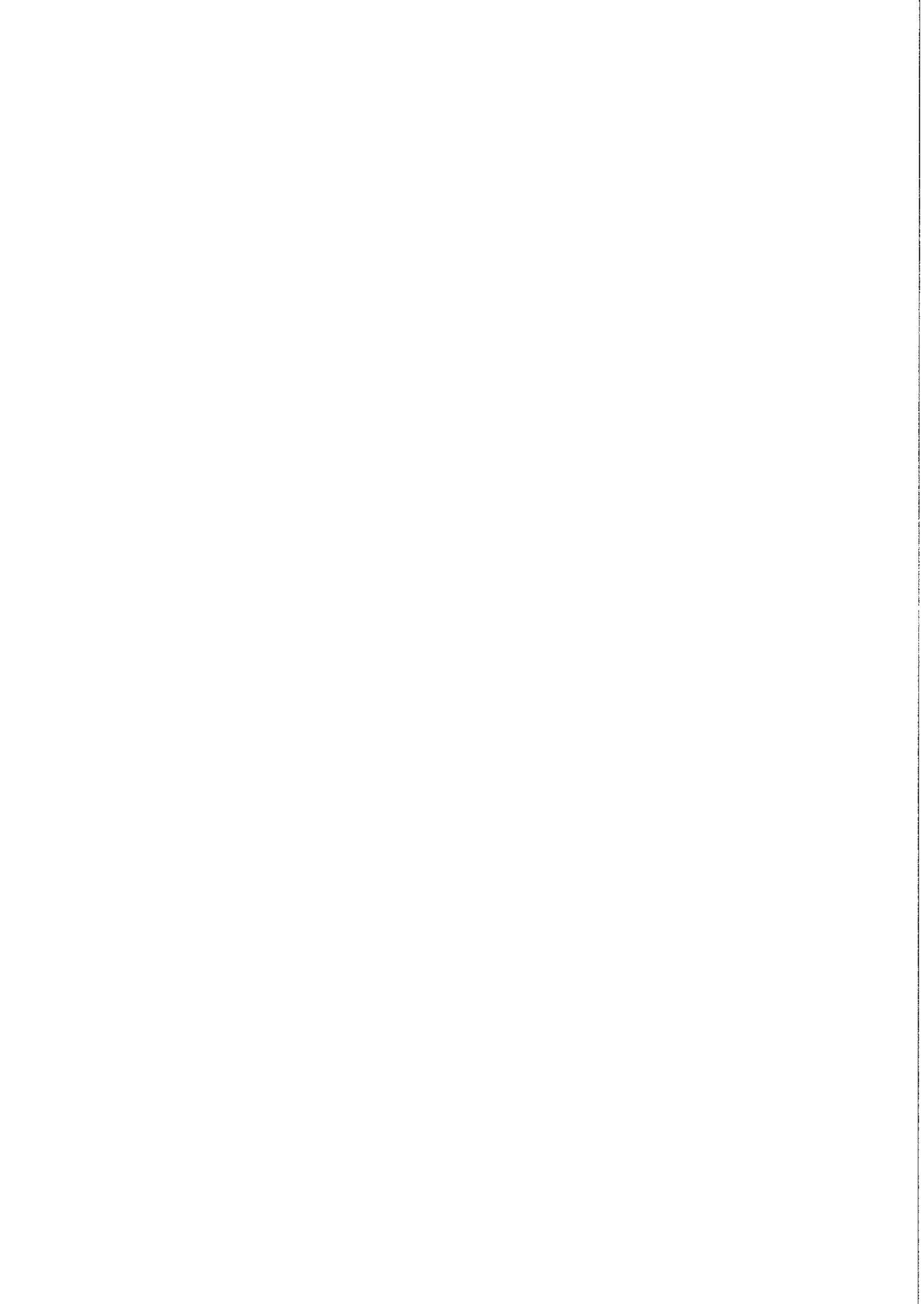


Write down an equation to show this.

[1 mark]

Answer \_\_\_\_\_

**END OF QUESTIONS**



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# Topic Test 18 (20 minutes)

## Basic algebra – Non-calculator

---

1 Work out the value of  $40 - (2 + 3)^2 \div 5$

[1 mark]

Answer \_\_\_\_\_

2 Which of these does **not** give an answer of 18?

Circle your answer.

[1 mark]

$30 - 3 \times 6 + 6$        $6 + 3 \times 2$        $5 + 2^3 \times 2 - 3$

3 Simplify  $2 \times 6 \times a \times a \times b \times b \times b$  using index notation

[2 marks]

\_\_\_\_\_

\_\_\_\_\_

Answer \_\_\_\_\_

---

4 Jean pays for gas, electricity and water every month.

Her gas bill is £G per month.

Her electricity bill is £10 per month more than her gas bill.

Her water bill is half the electricity bill.

Write down an expression for the total cost of the bills for 1 year.

**[4 marks]**

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Answer £ \_\_\_\_\_

5 Multiply out  $7a(3a - 9)$

**[2 marks]**

---

Answer \_\_\_\_\_



---

6 Expand and simplify

6 (a)  $7(2x + 3) + 4(6x + 9)$

[2 marks]

---

---

Answer \_\_\_\_\_

6 (b)  $8(4y - 3) - 3(5y + 1)$

[3 marks]

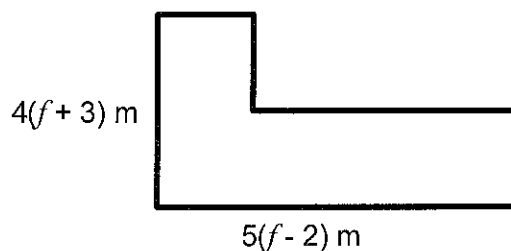
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Answer \_\_\_\_\_

7 Fencing is needed to go around a school field as shown.



Work out an expression for the total length of fencing needed.

[4 marks]

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Answer \_\_\_\_\_

---

**8** Factorise fully:

**8 (a)**  $27n - 36$

**[1 mark]**

Answer \_\_\_\_\_

**8 (b)**  $36n^2 - 60n$

**[2 marks]**

Answer \_\_\_\_\_

**8 (c)**  $30n^2m^2 - 50n^3m^2$

**[2 marks]**

Answer \_\_\_\_\_

---

9 Use one of these words to describe each of the following

[3 marks]

Expression

Equation

Identity

Formula

Inequality

9 (a)  $5x + 3 = 2x - 6$

\_\_\_\_\_

9 (b)  $6a(2a - 7) \equiv 12a^2 - 42a$

\_\_\_\_\_

9 (c)  $C = 12n + 36$

\_\_\_\_\_

10 Write down all the integers,  $n$ , satisfied by  $-8 \leq n < -1$

[2 marks]

Answer \_\_\_\_\_

11 John gets paid £300 per week for working 35 hours.

He then gets paid £15 per hour for any overtime.

Write down a formula for his total wages,  $w$ , when he works  $h$  hours overtime.

[1 mark]

Answer £ \_\_\_\_\_

- 
- 12 280 people attended a summer fair.  
The total cost for their food was £728.

Hotdogs cost  $H$  pence.

Beefburgers cost 20p more than hotdogs.

Ice creams cost twice as much as beefburgers.

Each person ate one hotdog, one beefburger and one ice cream.

Write down an equation in terms of  $H$  for this information.

**[3 marks]**

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Answer \_\_\_\_\_

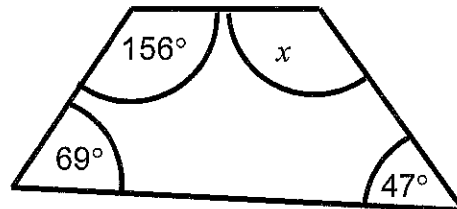
## Topic Test 19 (10 minutes)

### Properties of Polygons

Answer all questions.

- 1 (a) Work out the value of  $x$ .

[2 marks]



Not drawn accurately

Answer \_\_\_\_\_ degrees

- 1 (b) Give a reason for your answer.

[1 mark]

.....  
.....

- 2 Tick the correct statements.

[2 marks]

- 2 (a) A regular polygon has every side the same length.
- 2 (b) A regular polygon has every interior angle the same size.
- 2 (c) An irregular polygon doesn't have equal sides.
- 2 (d) The interior angle of a regular polygon is found by dividing 360 degrees by the number of sides.

- 3 Write down the sum of the angles in a triangle.

[1 mark]

Answer \_\_\_\_\_ degrees

4 The formula:

$$\text{interior angle} = \frac{180(n-2)}{n},$$

where  $n$  is the number of sides of a regular polygon, the formula can be used to find the size of an interior angle in a regular polygon.

Use this formula to find the size of one interior angle of a polygon with eight sides.

[2 marks]

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Answer \_\_\_\_\_ degrees

5 (a) Draw a trapezium in the space below. Mark on any important features.

[1 mark]

(b) Describe the important features of a kite. You may draw a diagram to help you, but you must clearly identify and explain the features.

[2 marks]

**Sides of a kite**

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**Angles of a kite**

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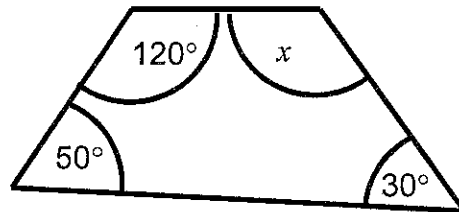
## Topic Test 20 (10 minutes)

### Properties of Polygons

---

- 1 (a) Work out the value of  $x$ .

[2 marks]



Not drawn accurately

Answer \_\_\_\_\_ degrees

- 1 (b) Give a reason for your answer.

[1 mark]

- 2 Tick the correct statements.

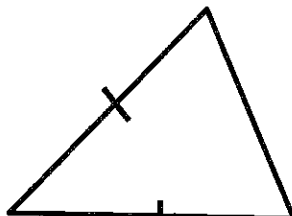
[2 marks]

- 2 (a) A rhombus has equal sides and equal angles.
- 2 (b) A rectangle is a type of parallelogram.
- 2 (c) A parallelogram is a type of rectangle.
- 2 (d) Opposite angles in a parallelogram add up to 180 degrees.

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

- 3 Give the mathematical name for this type of triangle.

[1 mark]



Answer \_\_\_\_\_ triangle

- 4 The formula to find the size of one exterior angle of a regular polygon is

$$\text{exterior angle} = 360 \div n$$

where  $n$  is the number of sides of the regular polygon.

Find the exterior angle of a regular polygon with 20 sides.

[2 marks]

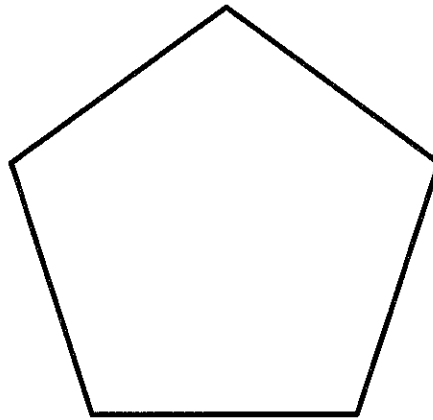
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Answer \_\_\_\_\_ degrees

- 5 (a) Write down the mathematical name for this shape.

[1 mark]



Answer \_\_\_\_\_

- 5 (b) Work out the size of one interior angle of a regular decagon.

[2 marks]

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Answer \_\_\_\_\_ degrees



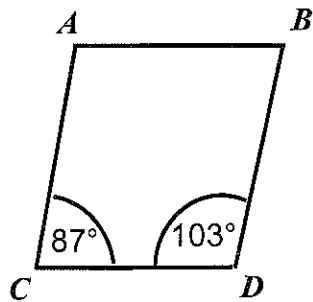
## Topic Test 21

### Properties of Polygons (20 minutes)

1 Look at the diagram below.

Jamal says that ABCD is a parallelogram

Kaidee says that ABCD is not a parallelogram.



Not drawn accurately

Who is correct? Explain your reasoning.

[2 marks]

.....

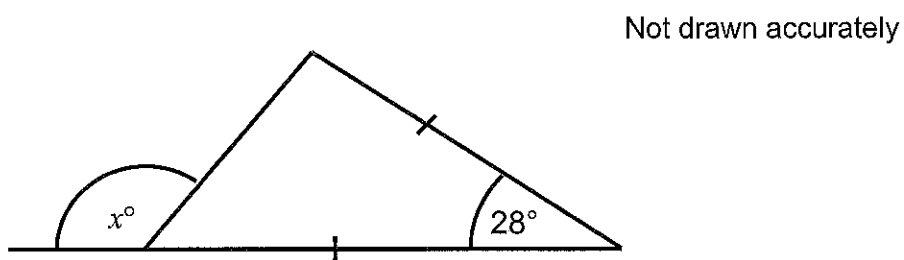
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2 (a) Work out the value of  $x$ .

[3 marks]



Not drawn accurately

Answer ..... degrees

(b) Give full reasons for your answer.

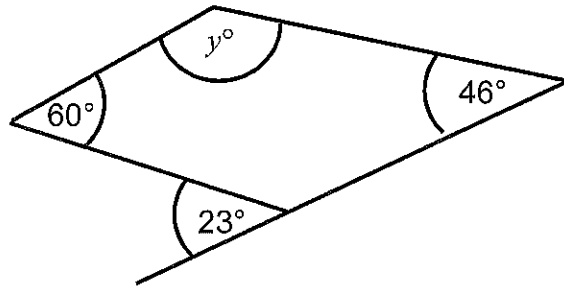
[2 marks]

.....

.....

3 Work out the value of  $y$ .

[2 marks]



Not drawn accurately

Answer ..... degrees

(b) Give a reason for your answer.

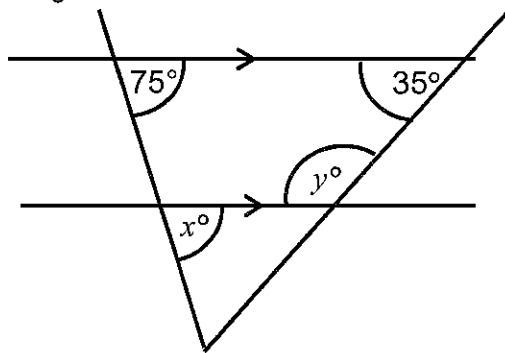
[1 mark]

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4 Look at the diagram below.



Not drawn accurately

4 (a) (i) Work out the value of  $x$ .

[1 mark]

Answer ..... degrees

4 (a) (ii) Work out the value of  $y$ .

[1 mark]

Answer ..... degrees

4 (b) Tick the correct statement.

$x$  and  $75^\circ$  are alternate angles

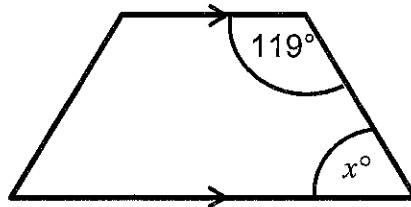
$x$  and  $75^\circ$  are corresponding angles

$x$  and  $75^\circ$  are opposite angles

$x$  and  $75^\circ$  are supplementary angles

5 Look at the quadrilateral below. Work out the value of angle  $x$ .

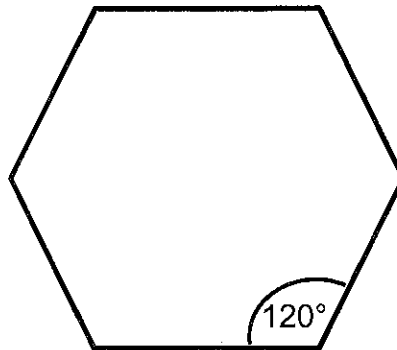
[2 marks]



Not drawn accurately

Answer ..... degrees

6 A regular polygon is shown below.



6 (a) Write down the mathematical name for this shape.

[1 mark]

Answer .....

6 (b) Work out the size of one exterior angle.

[2 marks]

.....  
.....  
.....  
.....

Answer ..... degrees

7 A regular polygon has 12 sides. Work out the size of **one** interior angle.

[2 marks]

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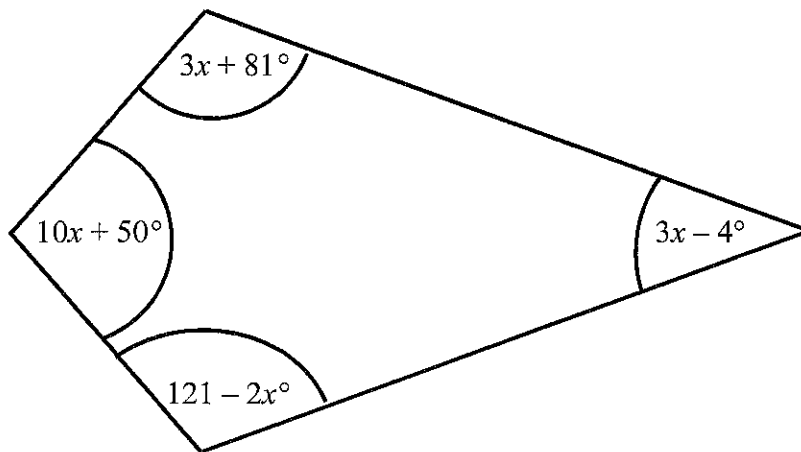
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Answer \_\_\_\_\_ degrees

8



Not drawn accurately

The diagram shows a kite.

Find the size of the biggest angle.

[4 marks]

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Answer \_\_\_\_\_ degrees

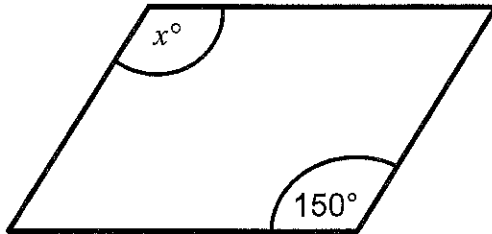
## Topic Test 22

### Properties of Polygons (20 minute)

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1 A parallelogram is shown below. Work out the value of angle  $x$ .

[2 marks]



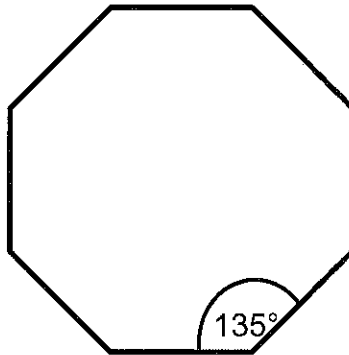
Not drawn accurately

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Answer \_\_\_\_\_ degrees

2 A regular polygon is shown below.



2 (a) Write down the mathematical name for this shape.

[1 mark]

Answer \_\_\_\_\_

2 (b) Work out the size of one exterior angle.

[2 marks]

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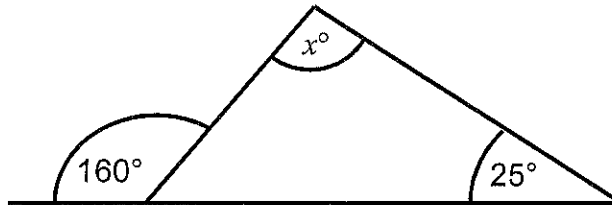
Answer ..... degrees

3

4 (a) Work out the value of  $x$ .

[2 marks]

Not drawn accurately



Answer ..... degrees

(b) Give reasons for your answer.

[1 mark]

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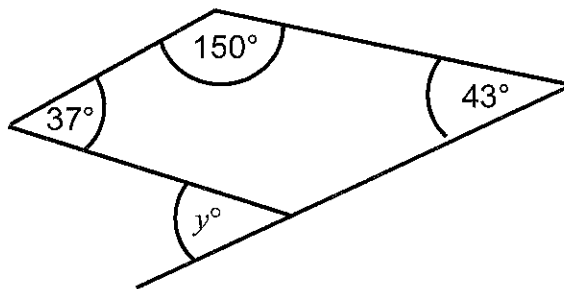
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5 (a) Work out the value of  $y$ .

[2 marks]

Not drawn accurately



Answer ..... degrees

(b) Give full reasons for your answer.

[2 marks]

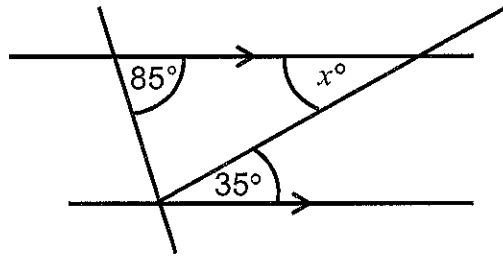
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6 (a) Work out the value of  $x$ .

[1 mark]



Not drawn accurately

Answer \_\_\_\_\_ degrees

(b) Give a reason for your answer.

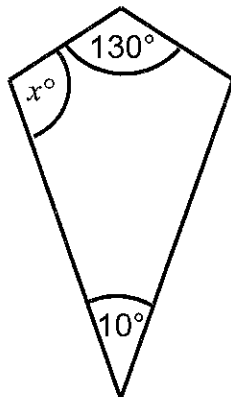
[1 mark]

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7 A kite is shown below. Work out the value of angle  $x$ .

[2 marks]



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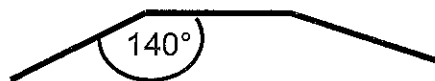
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Answer \_\_\_\_\_ degrees

- 8 Part of a regular polygon is shown.  
Work out the number of sides it has.



Not drawn accurately

[2 marks]

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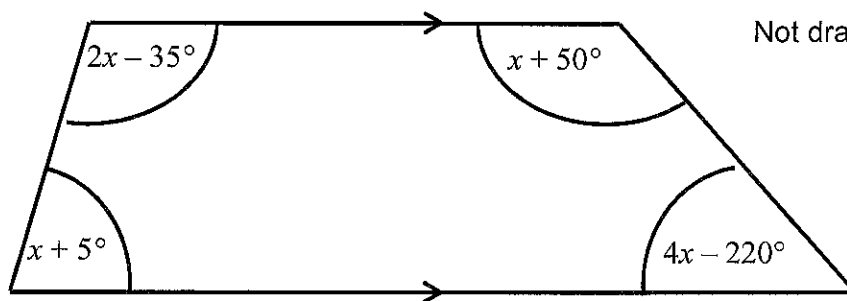
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Answer \_\_\_\_\_

9



Not drawn accurately

The diagram shows a trapezium.

Work out the value of  $x$ .

[3 marks]

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Answer \_\_\_\_\_ degrees



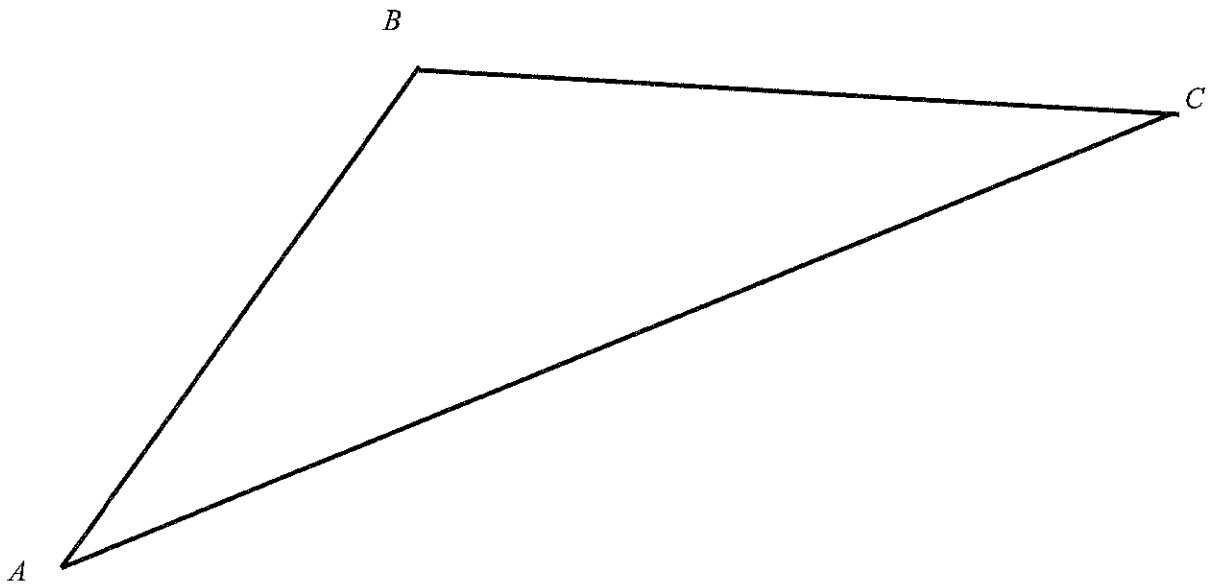
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## Angles

### Topic Test 23 (10 minutes)

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- 1 Triangle  $ABC$  is shown



Measure the **obtuse** angle in triangle  $ABC$

[1 mark]

Answer \_\_\_\_\_ degrees

{

}

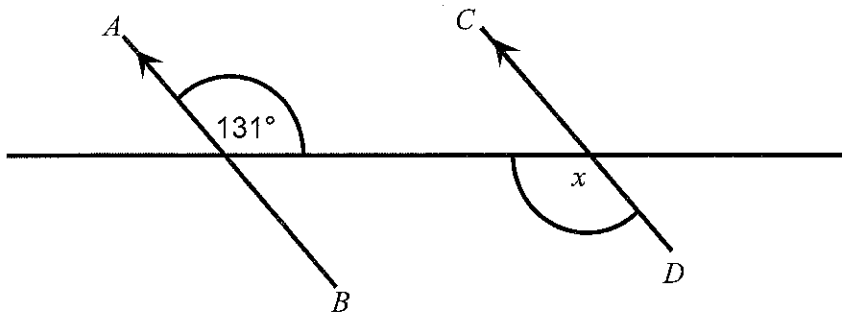
- 2 The line  $AB$  is drawn below  
Draw the line  $BC$  so that angle  $ABC$  is  $60^\circ$

[1 mark]



- 3 In the diagram,  $AB$  is parallel to  $CD$

Not drawn accurately



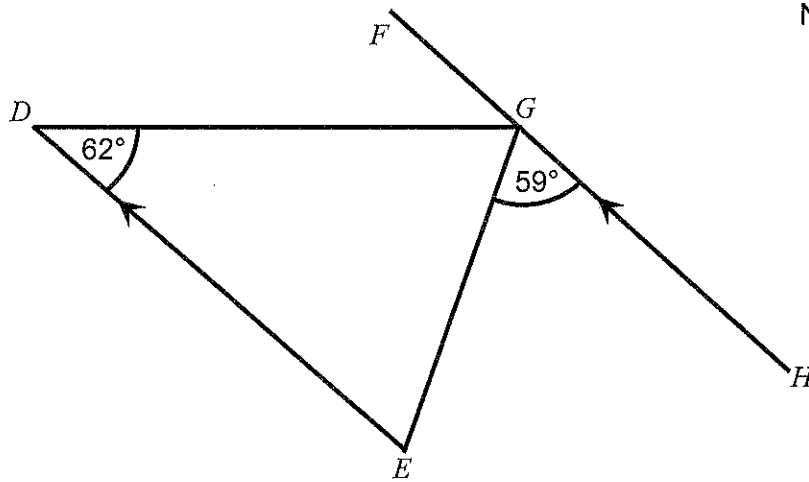
Write down the value of  $x$   
Give a reason for your answer

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

- 4 *FGH* is a straight line.  
*DE* is parallel to *FGH*



Not drawn accurately

Show that triangle  $DEG$  is isosceles.  
Give reasons for your answer.

[3 marks]

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**END OF QUESTIONS**



## Angles

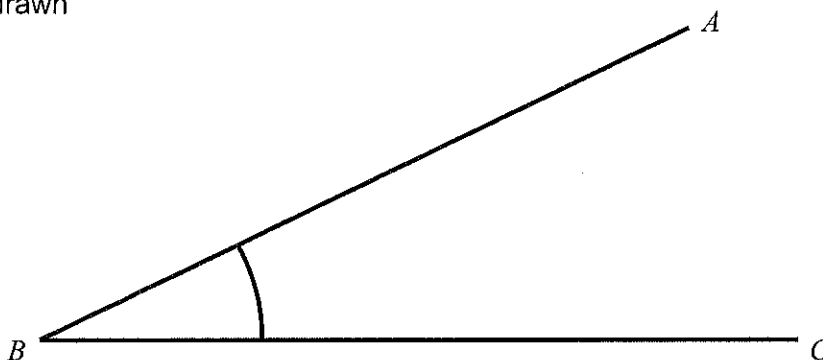
### Topic Test 24 (10 minutes)

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1 In the space below draw an angle of  $135^\circ$

[1 mark]

2 Angle  $ABC$  is drawn



2 (a) Name the type of angle  $ABC$

[1 mark]

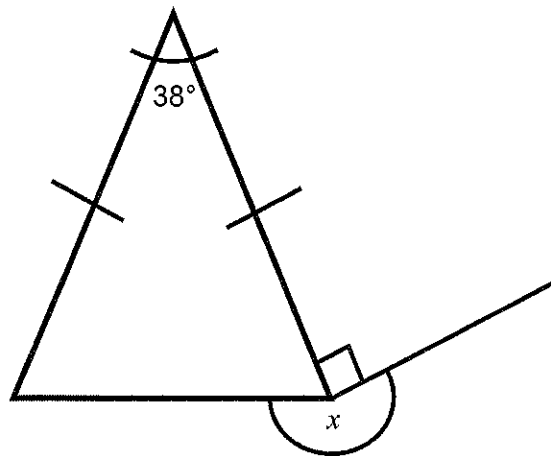
Answer \_\_\_\_\_

2 (b) Measure angle  $ABC$

[1 mark]

Answer \_\_\_\_\_ degrees

3 In triangle  $CDE$ ,  $CD = DE$



Not drawn accurately

Work out the value of  $x$   
Give reasons for your answer

[3 marks]

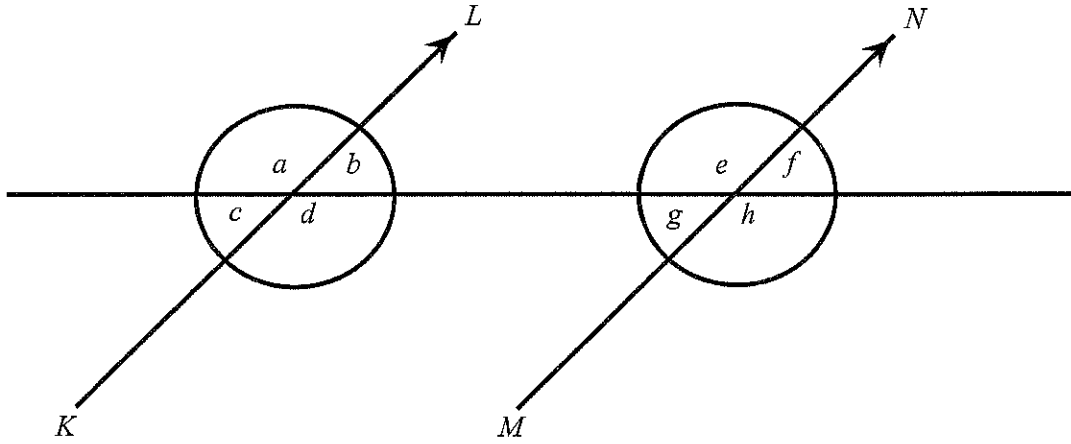
Answer \_\_\_\_\_

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4  $KL$  is parallel to  $MN$



4 (a) Write down the angle that is alternate to angle  $d$

[1 mark]

Answer \_\_\_\_\_

4 (b) Write down the angle that is corresponding to angle  $e$

[1 mark]

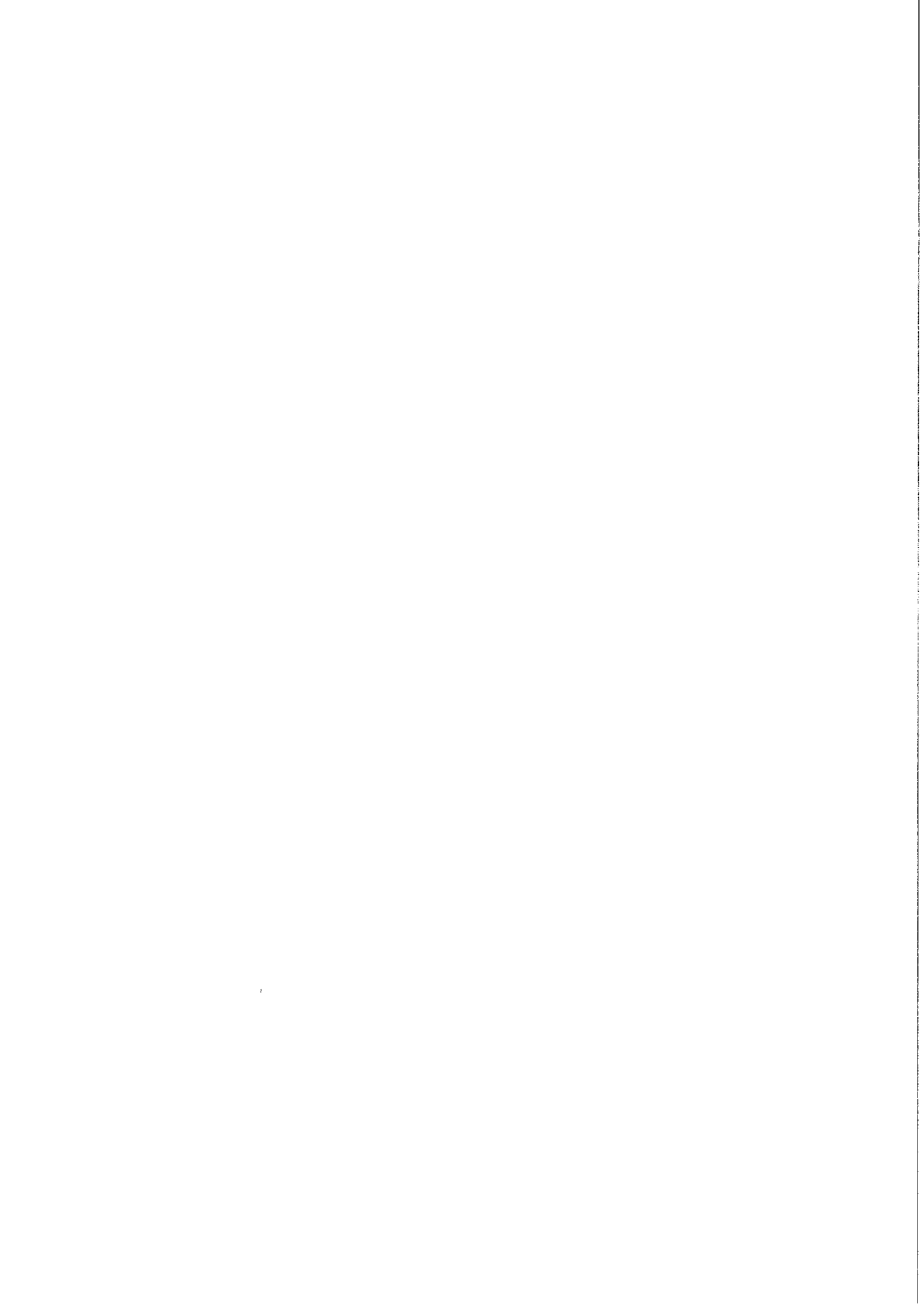
Answer \_\_\_\_\_

4 (c) Write down the angle that is vertically opposite to angle  $a$

[1 mark]

Answer \_\_\_\_\_

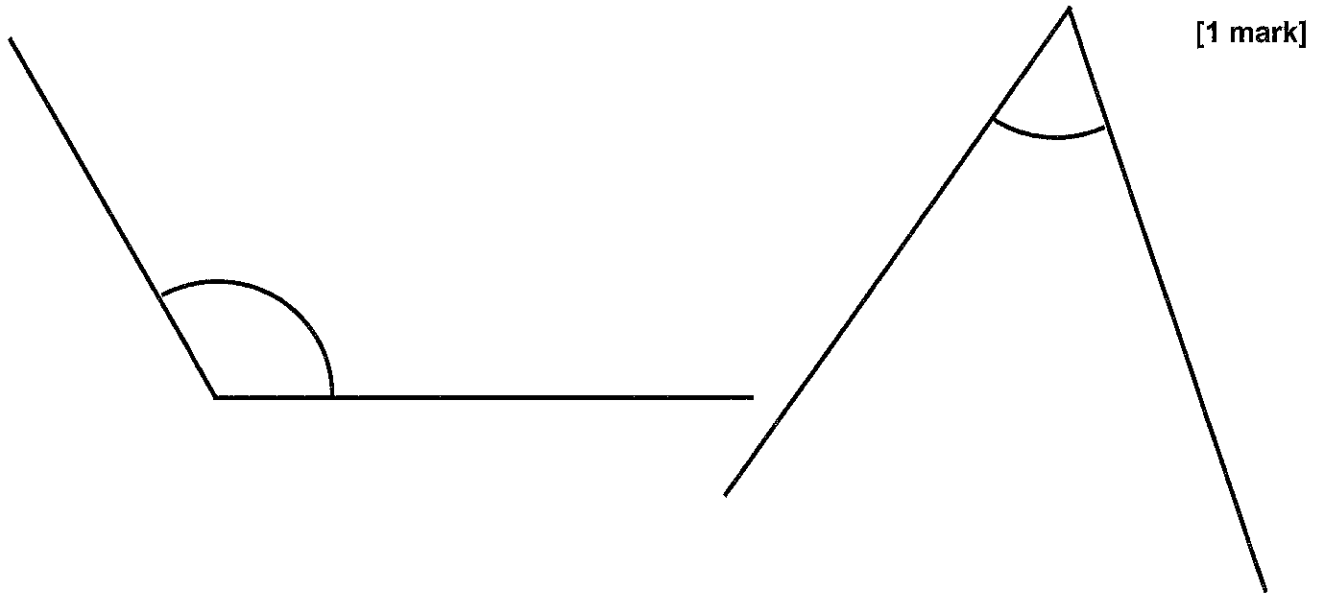
**END OF QUESTIONS**





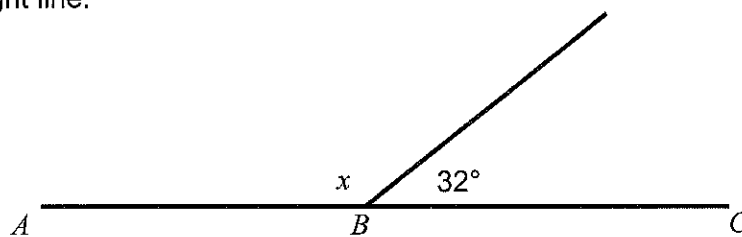
## Angles Topic Test 25 (20 minutes)

- 1 Measure and write down the size of the **acute** angle below.



Answer \_\_\_\_\_ degrees

- 2  $ABC$  is a straight line.



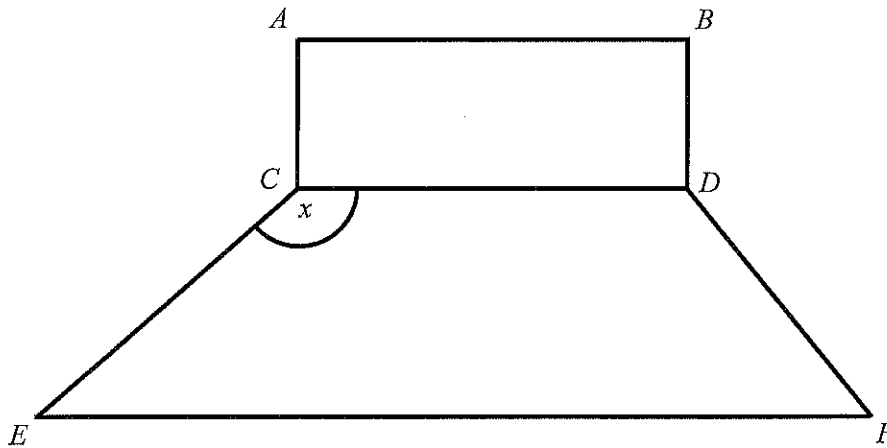
Write down the value of  $x$   
Give a reason for your answer.

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

- 3 The diagram shows a rectangle  $ABCD$  and a trapezium  $CDEF$



- 3 (a) What type of angle is the angle marked  $x$ ? [1 mark]

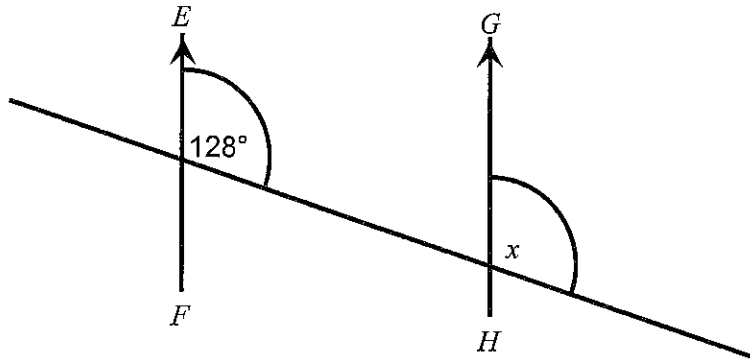
Answer .....

- 3 (b) Measure angle  $CEF$  [1 mark]

Answer ..... degrees

- 3 (c) On the diagram mark one pair of parallel lines with arrows ( $>$ ) [1 mark]

4 *EF* is parallel to *GH*



Not drawn accurately

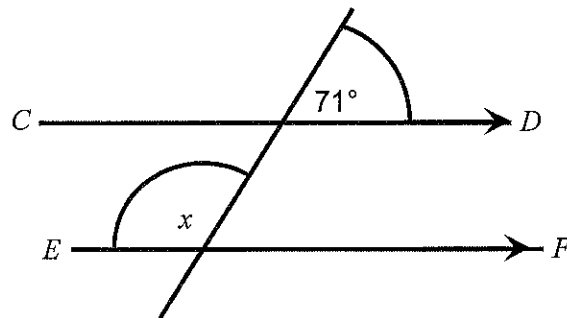
Work out down the value of  $x$   
Give a reason for your answer.

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

5 *CD* is parallel to *EF*



Not drawn accurately

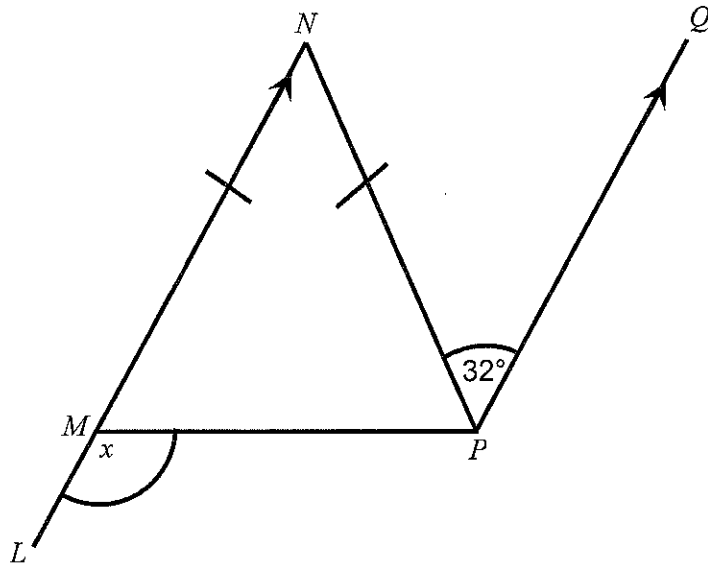
Work out the value of  $x$   
Give reasons for your answer

[3 marks]

Answer \_\_\_\_\_ degrees

Reasons \_\_\_\_\_

- 6  $LMN$  is a straight line and is parallel to  $PQ$   
 $MN = NP$



Not drawn accurately

Work out the value of  $x$   
Give reasons for your answer.

[3 marks]

Answer \_\_\_\_\_ degrees

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

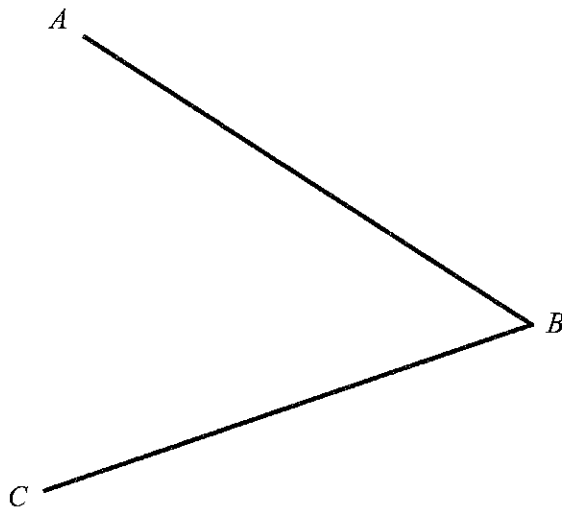
END OF QUESTIONS

## Angles Topic Test 25 (20 minutes)

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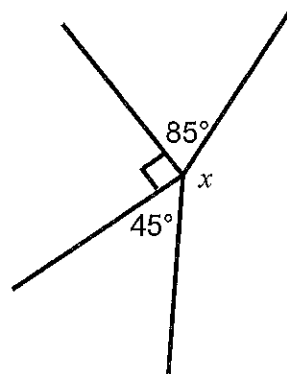
1 Measure the **reflex** angle  $ABC$

[1 mark]



Answer \_\_\_\_\_ degrees

2



Not drawn accurately

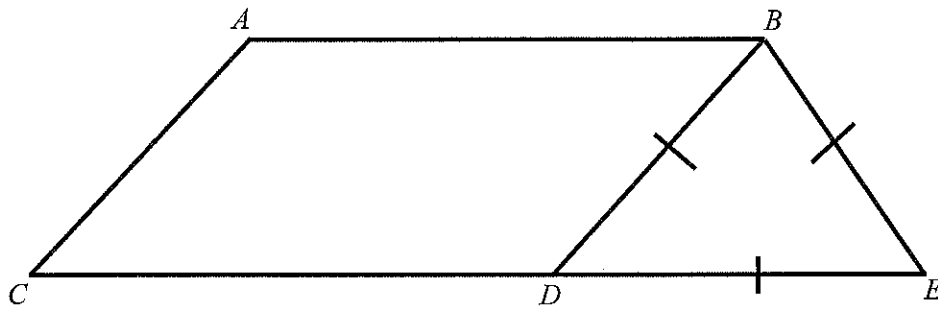
Work out the value of  $x$   
Give a reason for your answer.

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

- 3 The diagram shows a parallelogram  $ABCD$  and an equilateral triangle  $BDE$   
 $CDE$  is a straight line



Not drawn accurately

- 3 (a) Work out angle  $BDE$   
 Give a reason for your answer

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

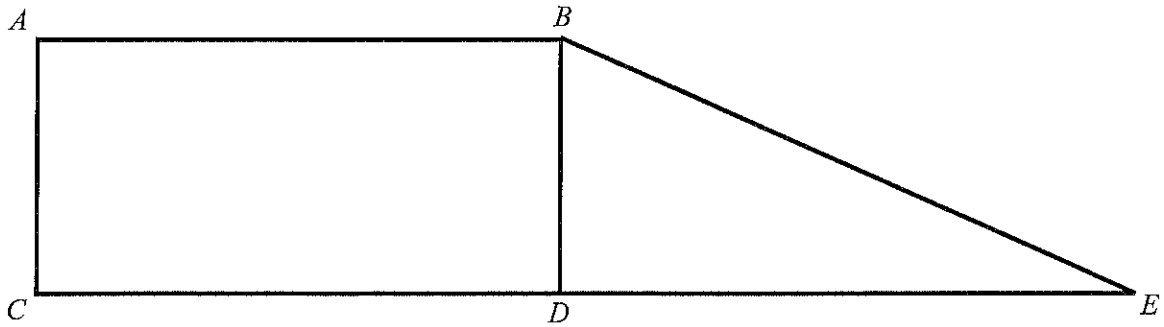
- 3 (b) Work out angle  $CDB$   
 Give a reason for your answer

[2 marks]

Answer \_\_\_\_\_ degrees

Reason \_\_\_\_\_

4 The diagram shows a rectangle  $ABCD$  and a right angled triangle  $BDE$



4 (a) Mark one pair of parallel lines with arrows (>)

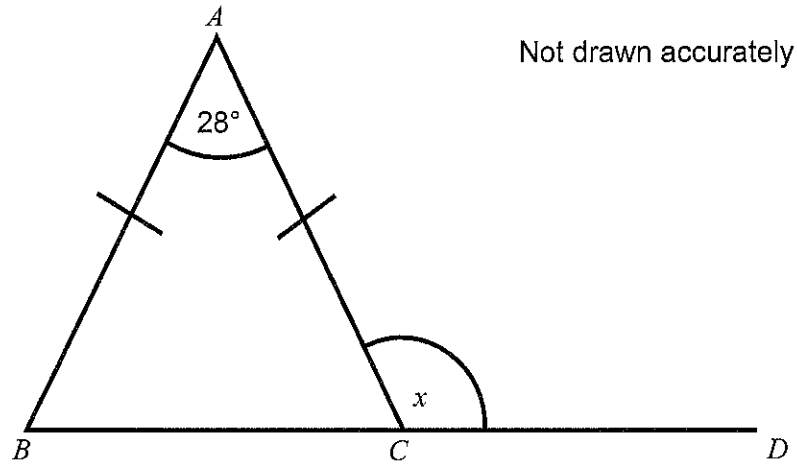
[1 mark]

4 (b) Measure angle  $BED$

[1 mark]

Answer \_\_\_\_\_ degrees

- 5  $AB = AC$   
 $BCD$  is a straight line



Work out the value of  $x$   
Give reasons for your answer.

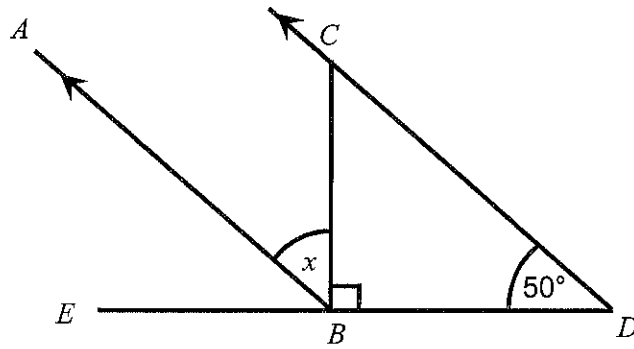
[3 marks]

Answer \_\_\_\_\_ degrees

Reasons \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



6  $AB$  is parallel to  $CD$



Not drawn accurately

Work out the value of  $x$   
Give reasons for your answer.

[3 marks]

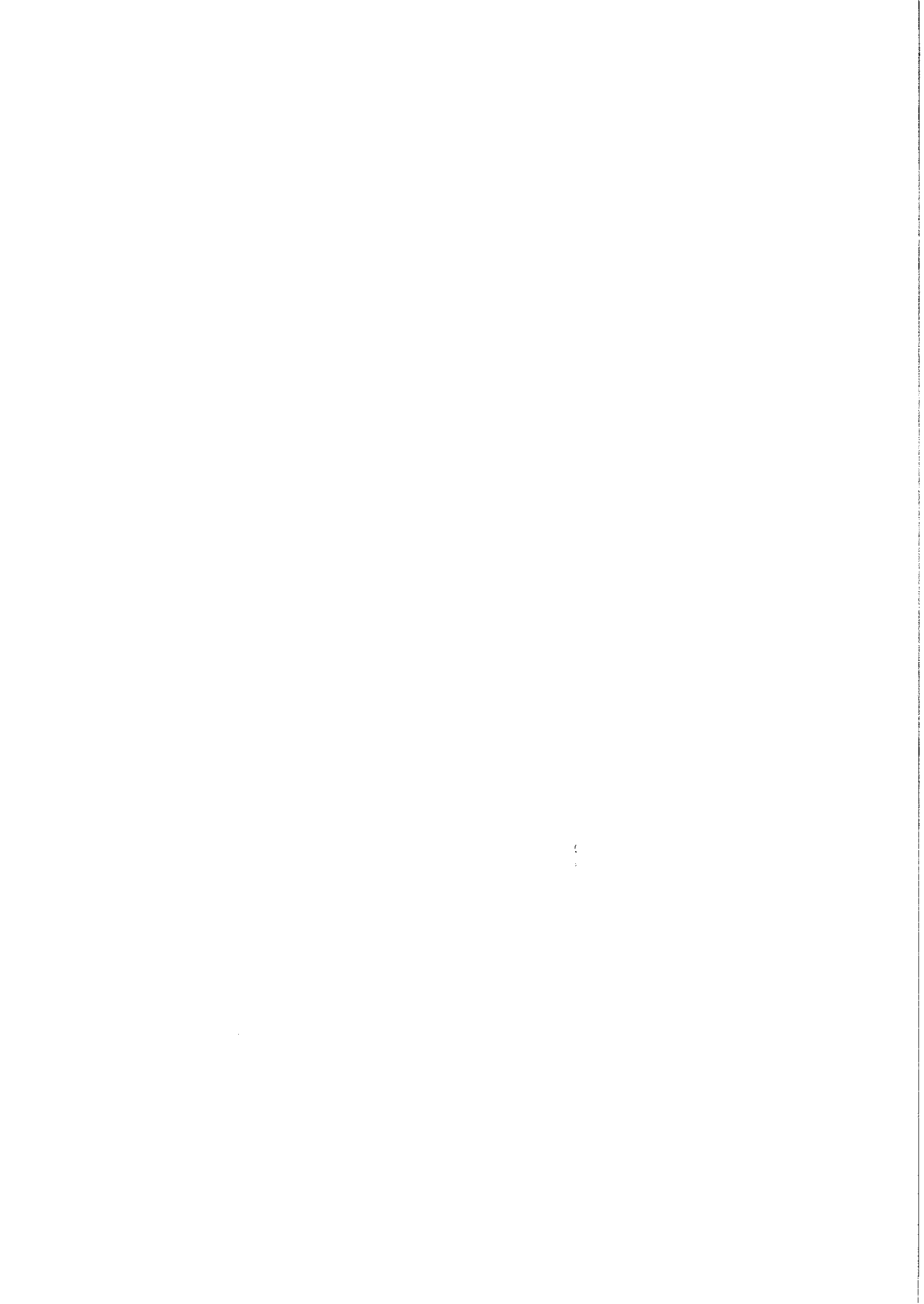
Answer \_\_\_\_\_ degrees

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

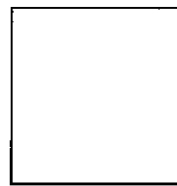
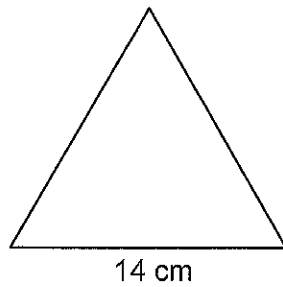
**END OF QUESTIONS**



## Topic Test 26 (20 minutes)

### Perimeter and Area (Calculator)

- 1 The diagram shows an equilateral triangle and a square.  
Each side of the triangle is 14 cm



Not drawn  
accurately

The perimeter of the triangle is equal to the perimeter of the square.

Work out the length of a side of the square.

**[3 marks]**

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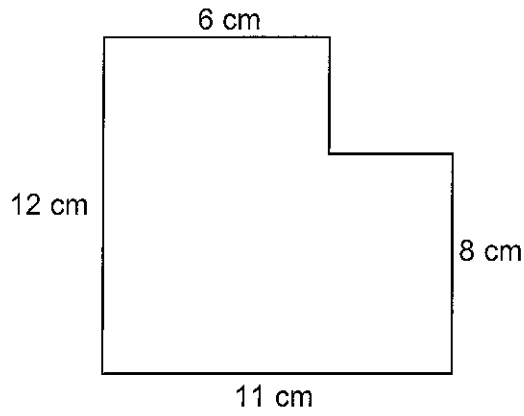
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Answer \_\_\_\_\_ cm

2 This shape is made from rectangles.



Not drawn accurately

Work out the area of the shape.

[4 marks]

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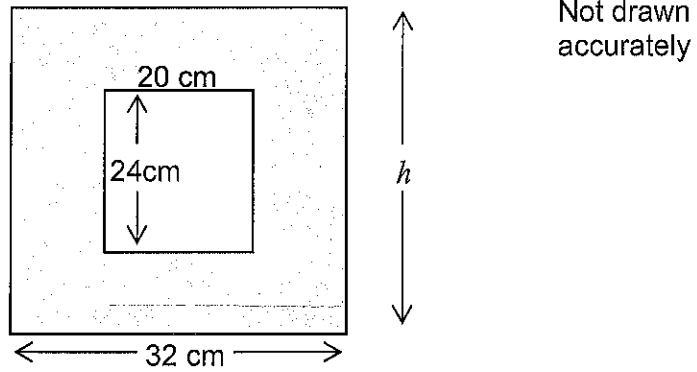
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Answer \_\_\_\_\_  $\text{cm}^2$

- 3 The diagram shows a rectangular mirror inside a rectangular frame.



The frame is the same width all the way around.

- 3 (a) Work out  $h$ , the overall height of the frame.

[3 marks]

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Answer \_\_\_\_\_ cm

- 3 (b) Work out the shaded area.

[3 marks]

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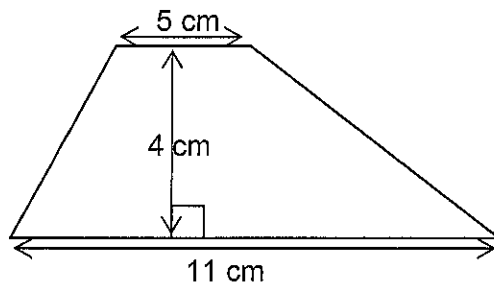
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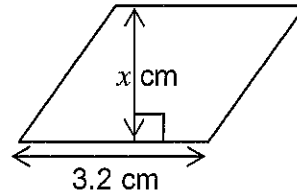
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Answer \_\_\_\_\_  $\text{cm}^2$

4



Not drawn accurately



The area of the trapezium is four times the area of the parallelogram.

Work out the value of  $x$ .

[3 marks]

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Answer \_\_\_\_\_

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5 (a) Circle the number of vertices of a triangular prism.

[1 mark]

4

5

6

9

5 (b) Circle the number of edges of a square based pyramid

[1 mark]

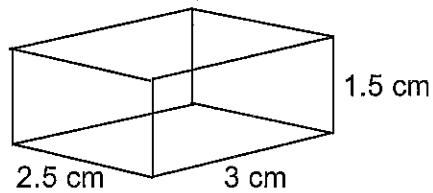
4

5

8

10

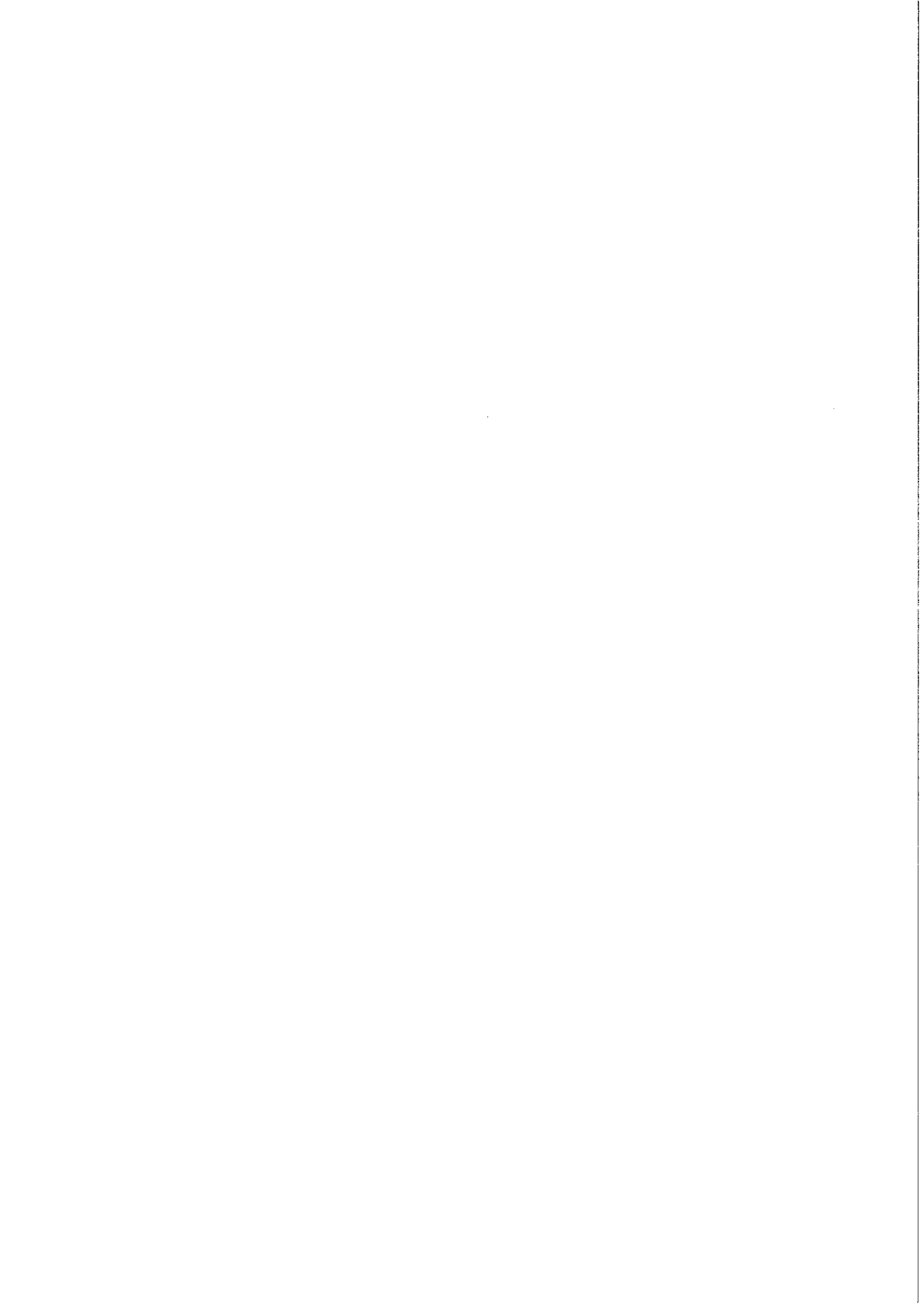
6 A framework in the form of a cuboid is made from wire.



Work out the total length of wire used.

[2 marks]

Answer \_\_\_\_\_ cm





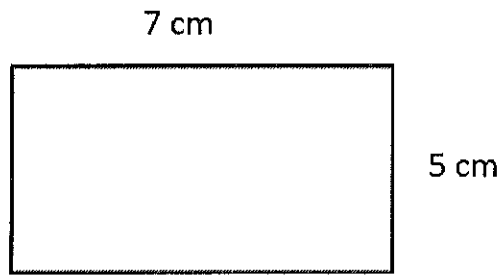
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# Topic test 27 – 20 minutes

## Perimeter and Area (Calculator)

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- 1 This rectangle is 7 cm long and 5 cm wide.



Not drawn accurately

- 1 a) Calculate the perimeter of the rectangle.

Answer \_\_\_\_\_ cm

[1 mark]

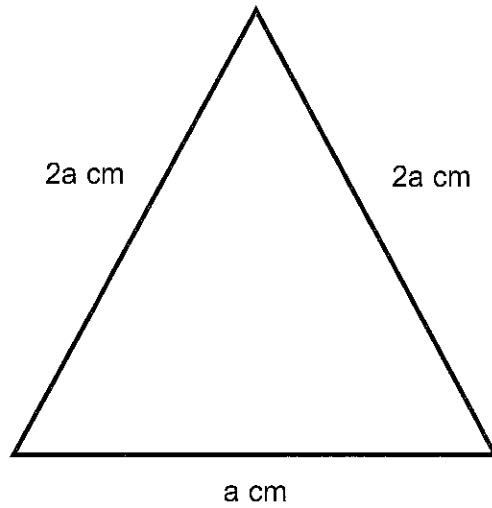
- 1 b) Calculate the area of the rectangle.

Answer \_\_\_\_\_ cm<sup>2</sup>

[1 mark]

- 
- 2 Work out the perimeter of this triangle.  
Simplify your answer.

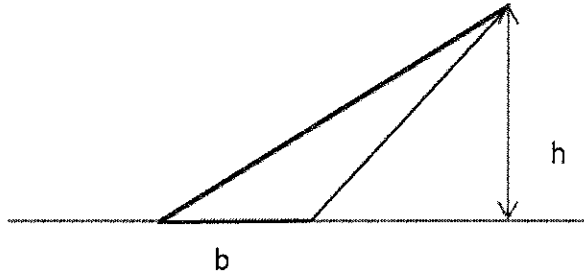
[1 mark]



Answer \_\_\_\_\_ cm

Find a formula for the area of each of the following shapes

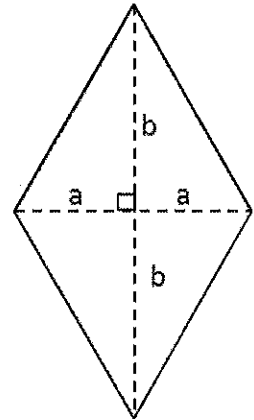
3 a)



Answer \_\_\_\_\_

[1 mark]

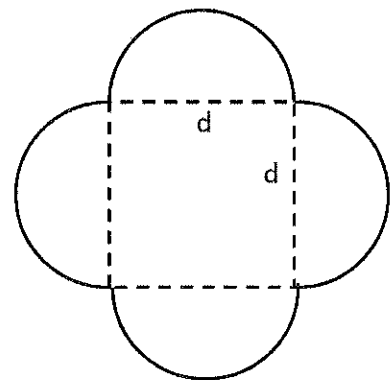
3 b)



Answer \_\_\_\_\_

[2 marks]

3 c)

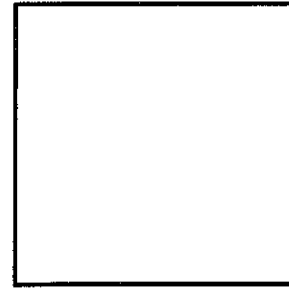
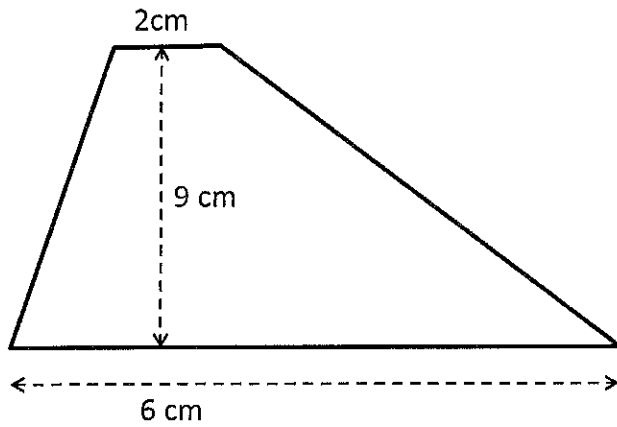


Answer \_\_\_\_\_

[3 marks]

4) The trapezium and the square have the same areas.

Not drawn accurately



What is the perimeter of the square?

Answer \_\_\_\_\_ cm

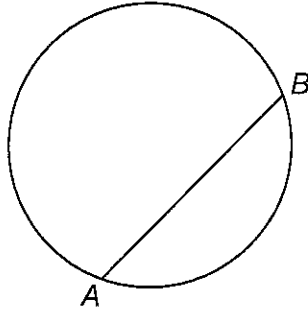
**[4 marks]**

## Topic Test 28 (20 minutes)

### Circumference and area – (Calculator)

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1 (a) Circle the word that describes the line  $AB$ .



[1 mark]

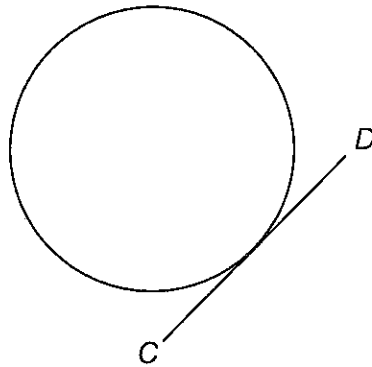
chord

diameter

radius

tangent

1 (b) Circle the word that describes the line  $CD$ .



[1 mark]

chord

diameter

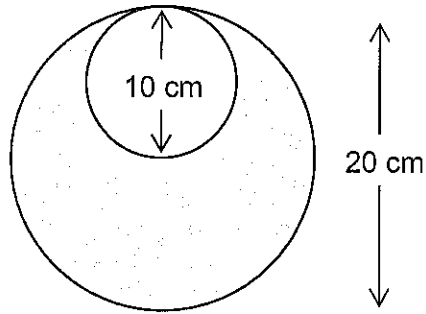
radius

tangent

2 This shape is made from circles.

The diameter of

the smaller circle is 10 cm  
the larger circle is 20 cm



Not drawn  
accurately

What fraction of the shape is shaded?

Give your answer in its simplest form.

[4 marks]

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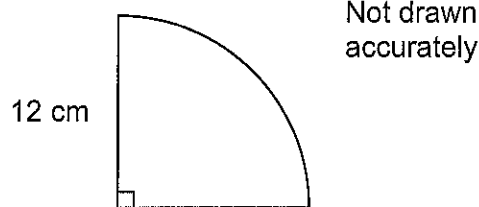
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Answer \_\_\_\_\_

- 3 The diagram shows a quarter circle of radius 12 cm



Work out the area of the shape.

[2 marks]

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Answer \_\_\_\_\_  $\text{cm}^2$

- 4 A marble is a sphere of radius 6 mm

You are given that surface area of a sphere =  $4\pi \times \text{radius}^2$

Work out the surface area of the marble.

[2 marks]

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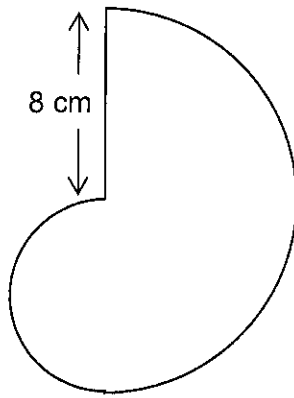
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Answer \_\_\_\_\_  $\text{mm}^2$

- 5 The diagram shows a shape made from two semicircles.  
The radius of the larger semicircle is 8 cm



Not drawn accurately

Work out the perimeter of the shape.  
Give your answer in terms of  $\pi$ .

**[3 marks]**

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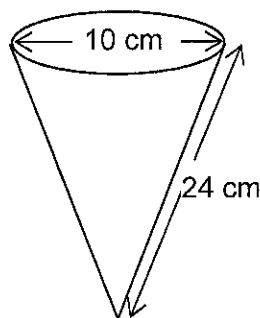
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Answer ..... cm



6 The diagram shows a solid cone.



Not drawn accurately

You are given that curved surface area of a cone =  $\pi \times \text{radius} \times \text{slant height}$

Work out the **total** surface area of the cone.

[4 marks]

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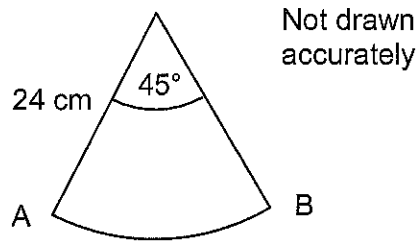
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Answer ..... cm<sup>2</sup>

7 The diagram shows a sector of a circle of radius 24 cm



Work out the arc length AB.

[3 marks]

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Answer \_\_\_\_\_ cm

# Topic Test 29 (20 mins)

## Rounding to Decimal places (calculator)

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1 (a) Round 7.24 to 1 decimal place.

[1 mark]

Answer \_\_\_\_\_

1 (b) Round 4.371 to 1 decimal place.

[1 mark]

Answer \_\_\_\_\_

1 (c) Round 13.4498 to 1 decimal place.

[1 mark]

Answer \_\_\_\_\_

2 (a) Round 3.789 to 2 decimal places.

[1 mark]

Answer \_\_\_\_\_

2 (b) Round 0.0481 to 2 decimal places.

[1 mark]

Answer \_\_\_\_\_

2 (c) Round 25.3047 to 2 decimal places.

[1 mark]

Answer \_\_\_\_\_

**3 (a)** Round 1.2345 to 3 decimal places. **[1 mark]**

Answer .....

**3 (b)** Round 0.03062 to 3 decimal places. **[1 mark]**

Answer .....

**3 (c)** Round 2.5996 to 3 decimal places. **[1 mark]**

Answer .....

**4 (a)** Calculate  $3.79 \times 2.53$   
Write your answer to 1 decimal place. **[1 mark]**

Answer .....

**4 (b)** Calculate  $\sqrt{32.8}$   
Write your answer to 1 decimal place. **[1 mark]**

Answer .....

**4 (c)** Calculate  $1.3^7$   
Write your answer to 1 decimal place. **[1 mark]**

Answer .....

5 (a) Calculate  $\frac{11.5}{65.3 - 23.78}$   
Write your answer to 4 decimal places.

[1 mark]

Answer \_\_\_\_\_

5 (b) Calculate  $\sqrt[5]{13}$   
Write your answer to 4 decimal places.

[1 mark]

Answer \_\_\_\_\_

5 (c) Calculate  $4 + 53 \div 17$   
Write your answer to 4 decimal places.

[1 mark]

Answer \_\_\_\_\_

5 (d) Calculate  $\sqrt{11.3 + 7.45}$   
Write your answer to 4 decimal places.

[1 mark]

Answer \_\_\_\_\_

5 (e) Calculate  $\sqrt{\frac{4}{7}}$   
Write your answer to 4 decimal places.

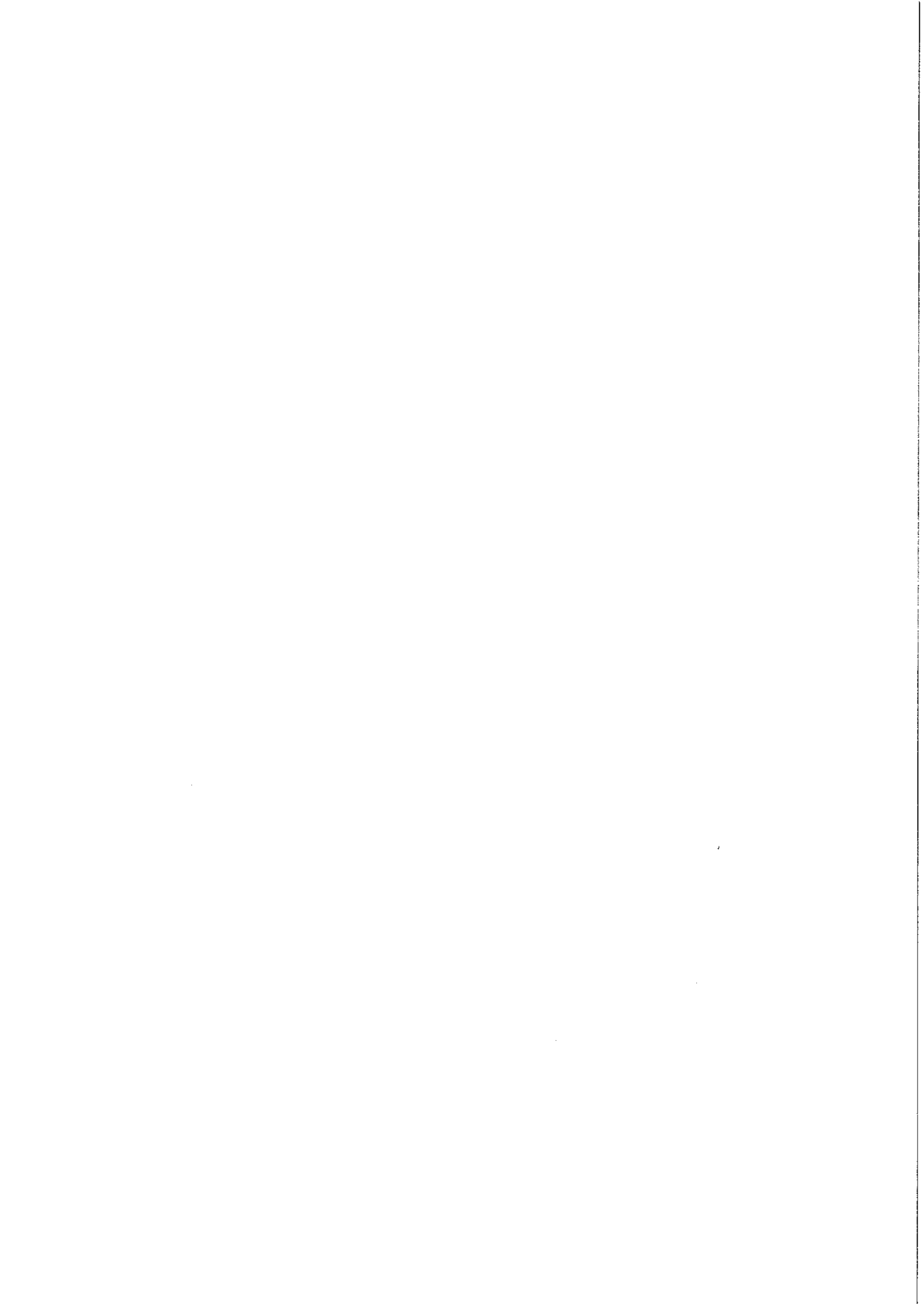
[1 mark]

Answer \_\_\_\_\_

5 (f) Calculate  $1.2^5$   
Write your answer to 4 decimal places.

[1 mark]

Answer \_\_\_\_\_



# Topic Test 30 (20 minutes)

## Rounding to Significant figures

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1 (a) Round 5.23 to 1 significant figure.

[1 mark]

Answer \_\_\_\_\_

1 (b) Round 367 to 1 significant figure.

[1 mark]

Answer \_\_\_\_\_

1 (c) Round 0.0483 to 1 significant figure.

[1 mark]

Answer \_\_\_\_\_

2 (a) Round 12.45 to 2 significant figures.

[1 mark]

Answer \_\_\_\_\_

2 (b) Round 0.0932 to 2 significant figures.

[1 mark]

Answer \_\_\_\_\_

2 (c) Round 123.7 to 2 significant figures.

[1 mark]

Answer \_\_\_\_\_

**3 (a)** Round 3.5792 to 3 significant figures. **[1 mark]**

Answer .....

**3 (b)** Round 0.010934 to 3 significant figures. **[1 mark]**

Answer .....

**3 (c)** Round 234681 to 3 significant figures. **[1 mark]**

Answer .....

**4 (a)** Calculate  $1.2 \times 34$   
Write your answer to 1 significant figure. **[1 mark]**

Answer .....

**4 (b)** Calculate  $\sqrt{27.9}$   
Write your answer to 1 significant figure. **[1 mark]**

Answer .....

**4 (c)** Calculate  $14^3$   
Write your answer to 1 significant figure. **[1 mark]**

Answer .....



5 (a) Calculate  $\frac{23+9.2}{34.2-5.71}$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

5 (b) Calculate  $\sqrt[3]{3.4}$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

5 (c) Calculate  $3 - 17 \div 23$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

5 (d) Calculate  $\sqrt{14.32 + 71.6}$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

5 (e) Calculate  $\sqrt{\frac{5}{9}}$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

5 (f) Calculate  $0.9^5$   
Write your answer to 4 significant figures. [1 mark]

Answer \_\_\_\_\_

