

**SECONDARY SCHOOL ANNUAL EXAMINATIONS 2008**  
DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION  
Educational Assessment Unit



**FORM 2**

**MATHEMATICS – SCHEME D  
(NON-CALCULATOR PAPER)**

**TIME: 45 minutes**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL

**DO NOT WRITE ABOVE THIS LINE**

**Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**INSTRUCTIONS TO CANDIDATES**

- **Answer all questions.**
  - **This paper carries 40 marks.**
  - **Calculators and protractors are not allowed.**
-

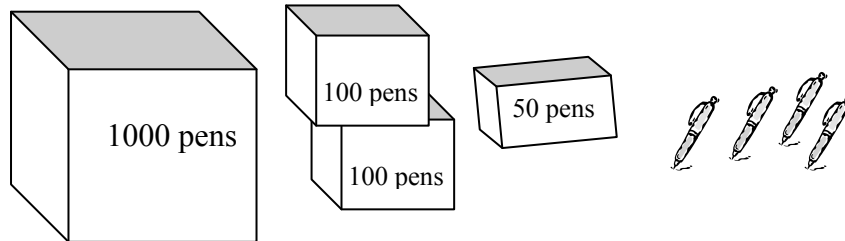
1. (a)  $1403 = \square$  thousand  $\square$  hundreds  $\square$  tens  $\square$  units

(b) Write in **figures**: Five thousand six hundred and seventeen

(c) Write 803 in **words**: \_\_\_\_\_

(6 marks)

2.



There are \_\_\_\_\_ pens in all.

(1 mark)

3. Put in order, starting from the **smallest**:

(a) 570, 7050, 75, 5007 \_\_\_\_\_

(b) €3, €2.70, €3.05, €0.79 \_\_\_\_\_ (4 marks)

4. Manuel has four number cards:

Write the **largest** number he makes using **all** the cards.

(1 mark)

5. Choose the correct answer.

(a)  $35c =$  \_\_\_\_\_

(b)  $10c - \square - 3c = 4c$

(2 marks)

6. Mark pays for a cup of tea costing 19c. He uses only **FOUR** coins to pay the exact amount.

Which 4 coins does he use to pay **exactly**?



\_\_\_\_\_ c    \_\_\_\_\_ c    \_\_\_\_\_ c    \_\_\_\_\_ c

(3 marks)

7. Fill in **all 3** empty boxes.

(a)  $753 + 1 = \square$

(b)  $753 + 20 = \square$

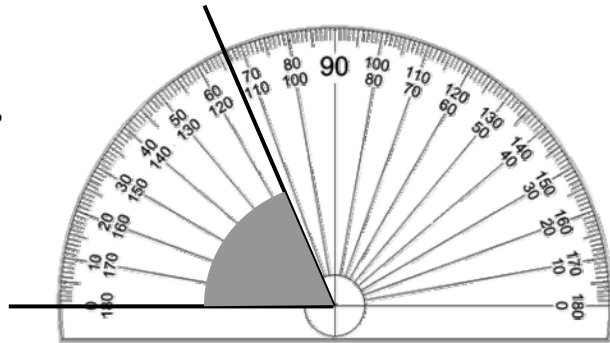
(c)  $753 - \square = 453$

(3 marks)

8.

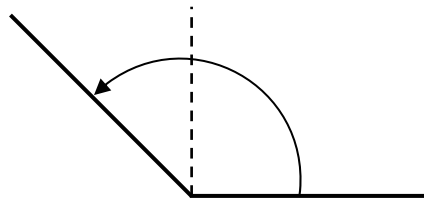
(a) This angle is **closest** to \_\_\_\_\_°

$60^\circ$   $70^\circ$   $80^\circ$   $110^\circ$



(b) This angle is **about** \_\_\_\_\_°

$100^\circ$   $60^\circ$   $135^\circ$   $55^\circ$



(2 marks)

9.

(a)  $\bigcirc + 72 = 90$

(b)  $732 - 514 = \bigcirc$

(4 marks)

10. Tom rolls a dice.

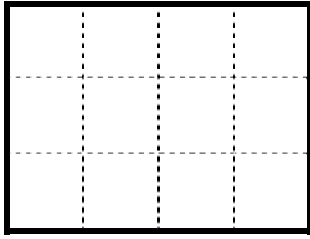
The chance of rolling a **four** is



$\frac{1}{6}$   $\frac{4}{6}$   $\frac{3}{6}$   $\frac{6}{6}$

(2 marks)

11.



The side of each small **square** is 1 cm long.

(a) The **perimeter** of the **rectangle** is \_\_\_\_\_ cm.

(b) The **area** of the **rectangle** is \_\_\_\_\_ cm<sup>2</sup>.

(2 marks)

12.

(a) Write the time shown using the **12-hour** clock. \_\_\_\_\_

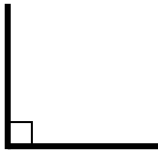


(b) Write 9.15 pm using the **24-hour** clock.

\_\_\_\_\_ : \_\_\_\_\_

(2 marks)

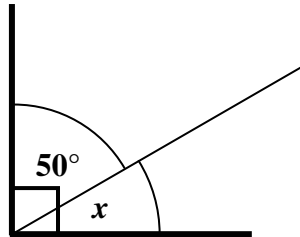
13.



(a) (i) This angle is \_\_\_\_\_ angle.

a reflex    a right    an acute

(ii) The angle = \_\_\_\_\_ °



(b) Calculate the size of the angle marked *x*.

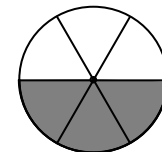
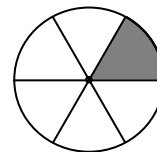
*x* = \_\_\_\_\_ °

(4 marks)

14.

Work out:

$$\frac{1}{6} + \frac{3}{6} = \underline{\hspace{2cm}}$$



(2 marks)

15.



€3.15

(a) Find the cost of **10** of these balls.

€ \_\_\_\_\_

(b) The cost of **one ball**, correct to the **nearest euro**, is € \_\_\_\_\_

(2 marks)

End of Paper

**FORM 2**

**MATHEMATICS – SCHEME D  
 (MAIN PAPER)**

**TIME: 1h 15min**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Main	Non Cal	Total

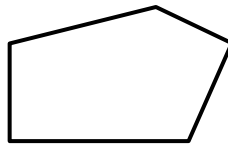
**DO NOT WRITE ABOVE THIS LINE**

**Name:** \_\_\_\_\_

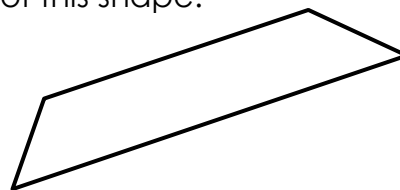
**Class:** \_\_\_\_\_

- **Answer all questions.**
- **This paper carries 60 marks.**
- **Calculators and protractors are allowed but all necessary working must be shown.**

1. (a) Mark the two **right angles** of this shape.

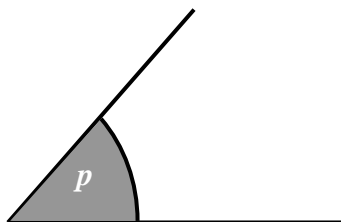


(b) Put **arrows** to show the **parallel** sides of this shape:



*(2 marks)*

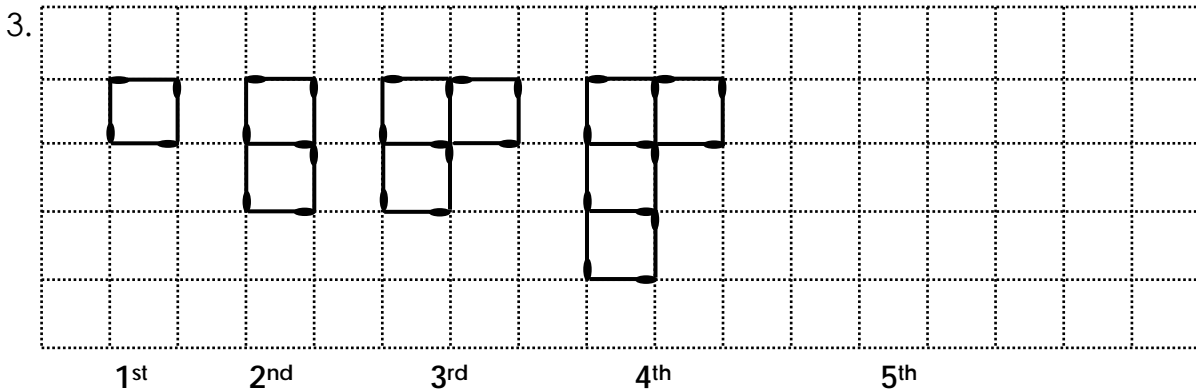
2.



Angle *p* is \_\_\_\_\_ angle.

an acute	an obtuse	a reflex
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*(1 mark)*



(a) Draw the 5<sup>th</sup> diagram in the grid above.

(b) Complete:

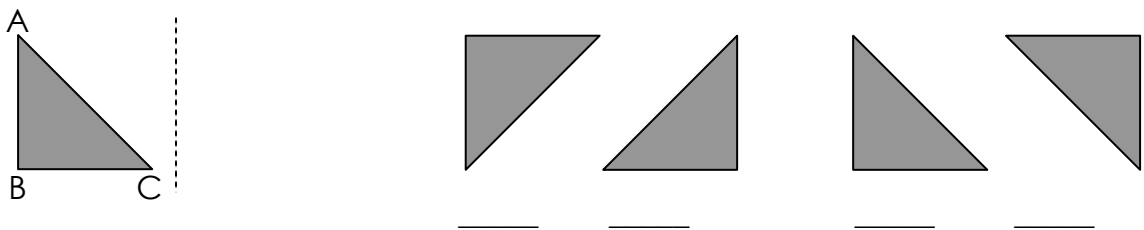
Diagram	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Number of matches	4		10		

(c) The rule to make this pattern is:

Start with 4 matches and **add** \_\_\_\_\_ matches every time.

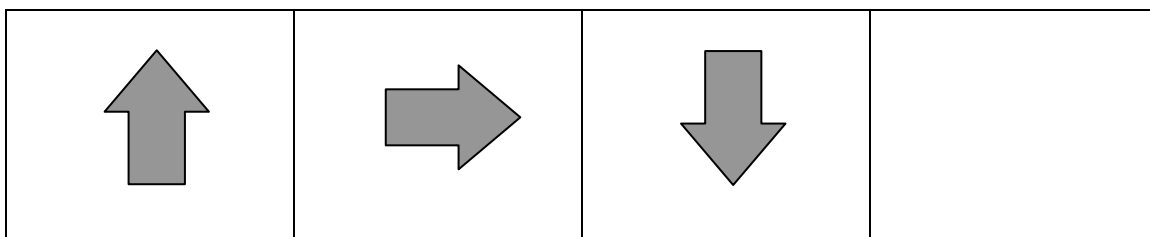
(5 marks)

4. (a) Tick (✓) the shape that is a **reflection** of triangle ABC in the broken line.



(b)

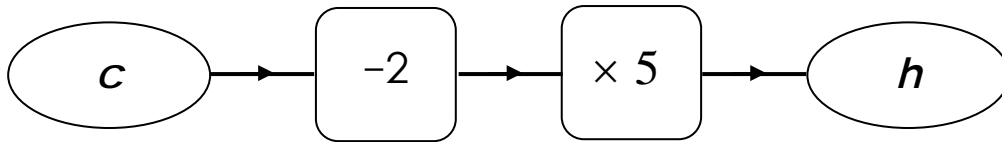
(i) Complete the sequence.



(ii) Is the sequence a **translation**, a **reflection** or a **rotation**? \_\_\_\_\_

(3 marks)

5.

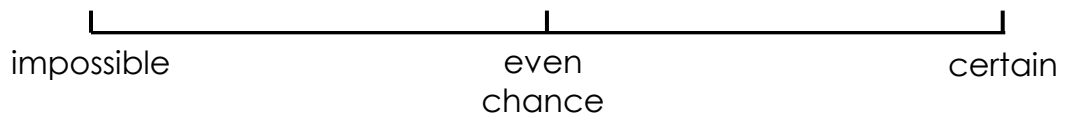


Use the **number machine** to complete the table below:

<i>c</i>	<i>h</i>
4	10
6	
22	
	50

(3 marks)

6. The figure below is a probability scale.



(a) Tick (✓) the event below, which has an **even** chance.

- (i) A baby is born. The baby is a boy.
- (ii) It will rain next week.

(b) Tick (✓) the event below, which is **certain**.

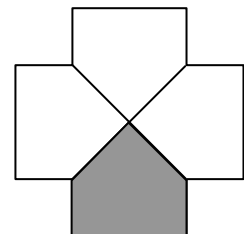
- (i) All windows have curtains.
- (ii) Apples grow on trees.

(2 marks)

7.

(a) (i) What **fraction** of the shape is shaded? \_\_\_\_\_

(ii) What **percentage** of the shape is shaded? \_\_\_\_\_



(b) What is 10% of €2?

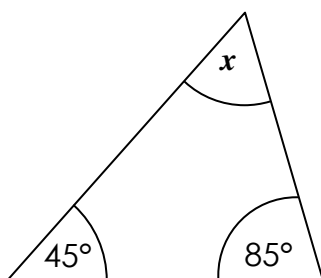
\_\_\_\_\_

(4 marks)

8. (a) Use a protractor to draw and mark,  
(i) an angle of  $65^\circ$ .

(ii) an angle of  $130^\circ$ .

- (b) **Calculate** the size of the angle marked  $x$ . (Do **not** use a protractor.)



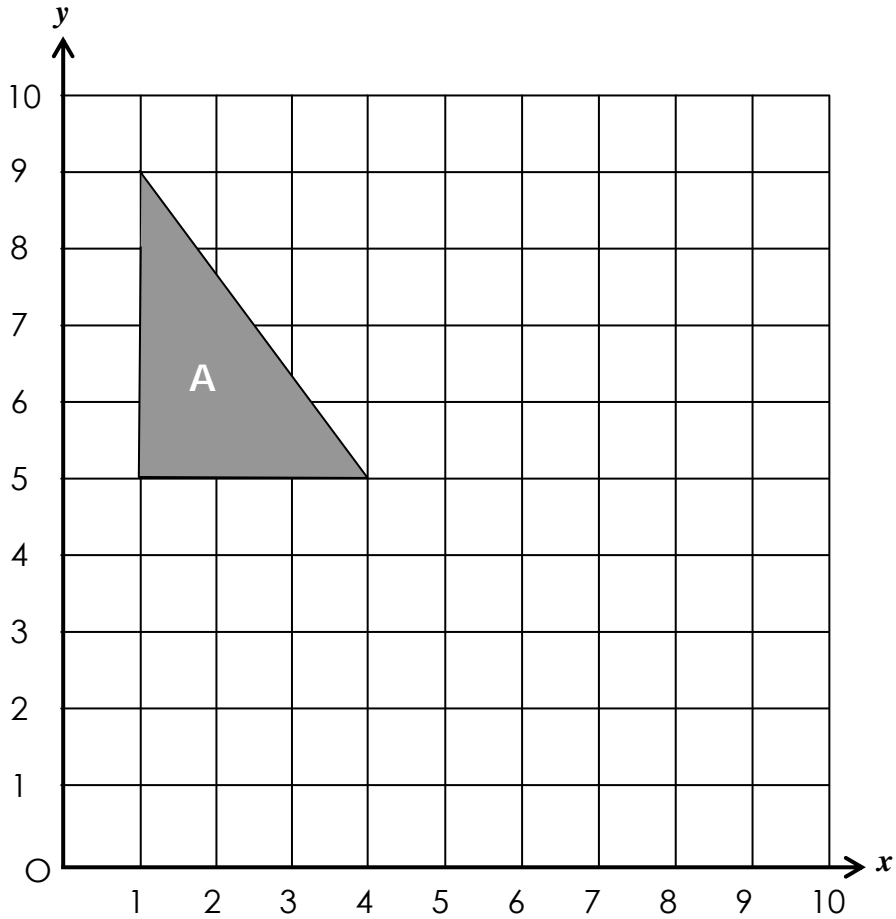
$$x = \underline{\hspace{2cm}}^\circ$$

(4 marks)



9.

D



(a) Triangle A is \_\_\_\_\_ and also \_\_\_\_\_.

isosceles      equilateral      scalene      right-angled

(b) One corner of triangle A is at point (1, 9).

Write the co-ordinates of **one** of the other corners. (   ,   ).

(c) Use a ruler to measure the 3 sides of triangle A.

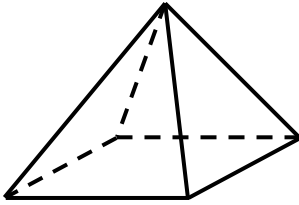
**Vertical** side = \_\_\_\_\_ cm or \_\_\_\_\_ mm.

**Horizontal** side = \_\_\_\_\_ cm.

**Slanting** side = \_\_\_\_\_ cm.

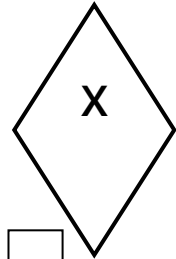
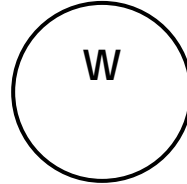
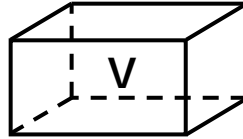
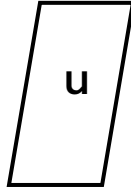
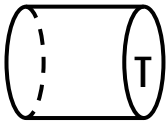
(d) On the grid above, **translate** triangle A  $\begin{pmatrix} 5 \text{ right} \\ 4 \text{ down} \end{pmatrix}$

10. (a)



This **solid** has \_\_\_\_\_ faces.

(b) Tick (✓) the **solids** from the shapes shown below.

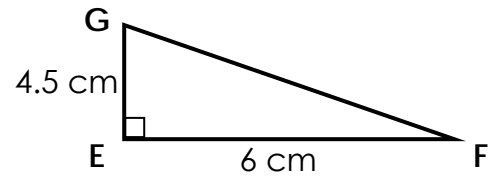


(c) Shape T is a \_\_\_\_\_.

cylinder   sphere   cube   square

(4 marks)

11. (a) Use ruler and protractor to draw triangle EFG **accurately**.



(b) Measure angle F.

Angle F = \_\_\_\_\_°

(4 marks)

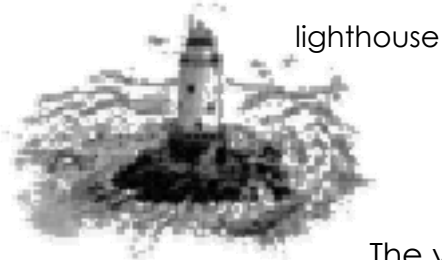
12. (a) Mandy types the following commands using LOGO.

**PD FD 100 RT 90 FD 50 LT 90 FD 50**

What shape will she see when she presses the ENTER key?  
(Start from the TURTLE.)

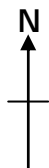


(b)



The yacht is \_\_\_\_\_ of the lighthouse.

North	South	East	West
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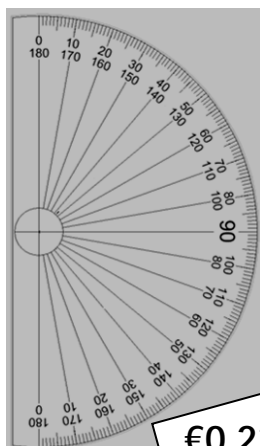
(4 marks)

13. These are euro coins.



(a) Fill in the value of the three coins, above.

(b) George buys a protractor.



**€0.23**

George gives the shopkeeper a **50c** coin.

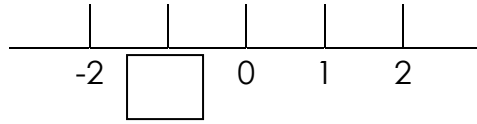
(i) Write, **in figures**, the amount of **change** he receives.

\_\_\_\_\_

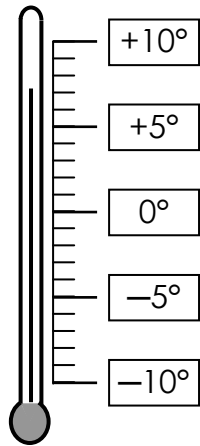
(ii) **Draw** the coins that the shopkeeper gives him.

(4 marks)

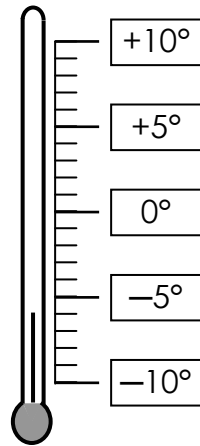
14.



- (a) Fill in the missing number on the number line above.
- (b) Use + and – numbers to write down these temperatures.



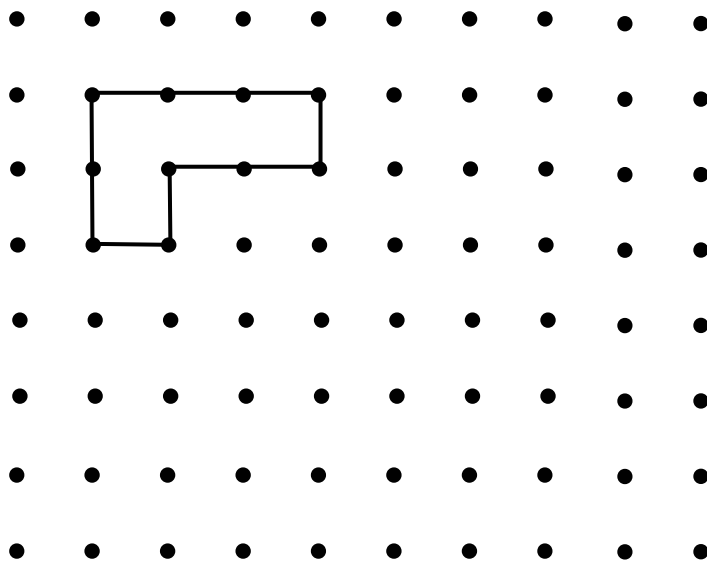
\_\_\_\_\_



\_\_\_\_\_

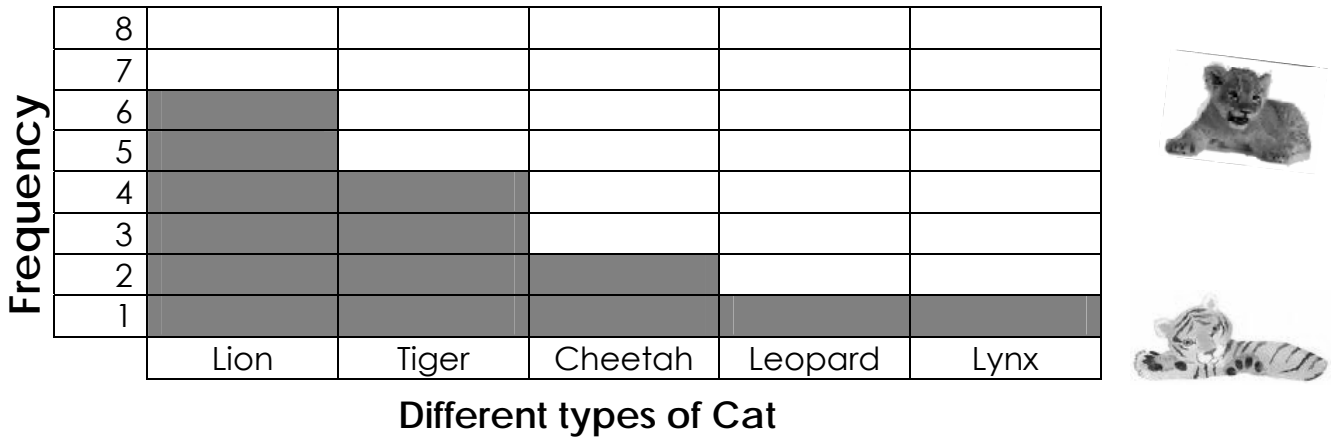
(3 marks)

15. Draw 4 more similar tiles to show that the shape **tessellates**.



(2 marks)

16. The bar chart below shows the number of cats born at a zoo.



(a) Fill in the frequency table, below.

Type of Cat	Lion	Tiger	Cheetah	Leopard	Lynx
Frequency	6				

(b) How many cats were born **altogether**? \_\_\_\_\_

(c) How many **more lions** than **tigers** were born? \_\_\_\_\_

(a) Which big cats had **less** than 4 young?  
 \_\_\_\_\_

(5 marks)

End of paper