



Year 9 Baseline Test

Calculator

Time: 1 hour

Marks: 50 marks

Name _____

Date _____ Class _____

1a. Work out $\frac{2.07 + 1.7^3}{8.13}$.

Write down all the figures on your calculator display.

(2)

b. Round your answer to one significant figure.

(1)

2. Solve the following equations.

a. $5x = 10$

(1)

b. $\frac{x}{3} + 2 = 10$

(2)

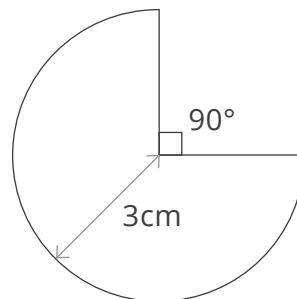
c. $\frac{7x - 2}{5} = 8$

(2)

d. $4(2x - 3) = 36$

(2)

3. A sector with an angle of 90° is removed from a circle, as shown below:



a. Find the area of the shape. Give your answer to one decimal place.

(3)

b. Find the perimeter of the shape. Give your answer to one decimal place.

(3)

4. Below are the heights of a netball team.

170cm, 165cm, 172cm, 170cm, 168cm, 167cm, 169cm

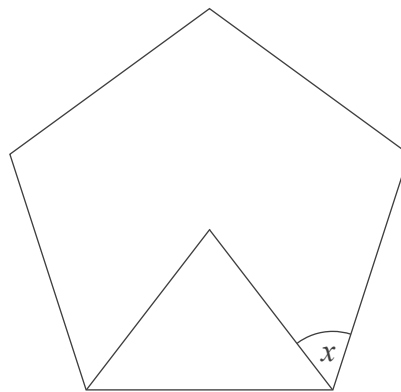
a. Write down the mode. (1)

b. Work out the median. (2)

c. Work out the range. (2)

d. Calculate the mean. Give your answer to one decimal place. (2)

5. The following diagram consists of two regular shapes. Find the size of the angle marked x . (3)



6. A line has the equation $2y = -4x + 6$

a. What is the gradient of the line? (2)

b. What is the y -intercept of the line? (1)

- 7a. A company needs to print 6300 leaflets. It takes 4 of their printers 3 hours to print the first 3600 leaflets, then one printer breaks. How much longer will it take the remaining printers to print the rest of the leaflets? Give your final answer in hours and minutes.

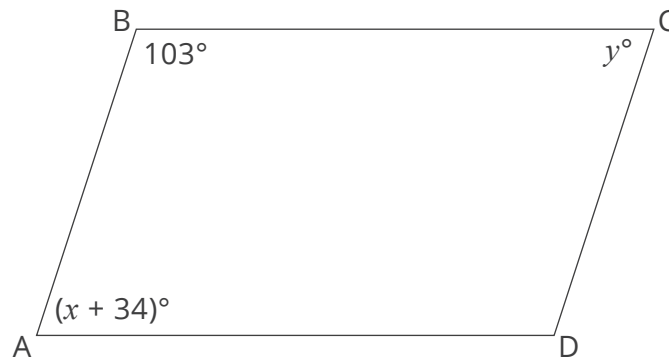
(5)

- b. What assumption have you made in your answer?

(1)

8. The parallelogram ABCD is shown below.

Angle DAB = $(x + 34)^\circ$, angle ABC = 103° and angle BCD = y° .



Giving reasons for your answers:

- a. Work out the value of x .

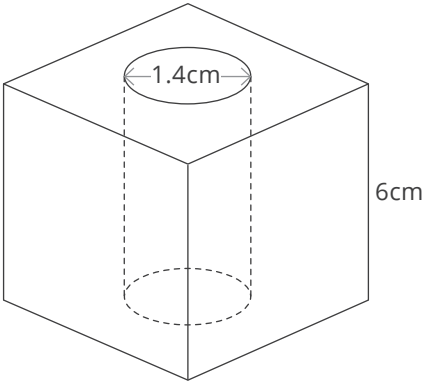
(3)

- b. Work out the value of y .

(2)

9. A 6cm wooden cube has a cylindrical hole drilled through it.
 If the drill bit (the part that makes the hole) has a diameter of 1.4cm, what volume of the cube remains? Give your answer to 2 decimal places.

(6)



Volume = _____

10. The table below shows the favourite activity of 120 London tourists.

Favourite Activity:	London Eye	Buckingham Palace	London Dungeons
No of Tourists:	17	68	35

Construct a pie chart to represent this data. (4)

