Final Countdown Revision Mat 5

1) Work out
$$2\frac{3}{4} + 3\frac{4}{9}$$
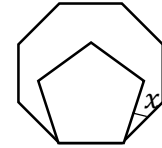
2) a) Express 0.000205 in standard form.
b) Write 7.54×10^{-5} in ordinary form.
c) Work out
$$(4 \times 10^8) \times (7 \times 10^{-4})$$
Express your answer in standard form.

3) a) Draw a cumulative frequency graph for the following information.
b) Estimate a value for the median.
c) How many people weigh more than 95kg?

Weight (Kg)	Frequency
$70 < w \le 80$	15
$80 < w \le 90$	34
$90 < w \le 110$	26
$110 < w \le 120$	5

4) Solve
$$x^2 + 11x + 24 = 0$$

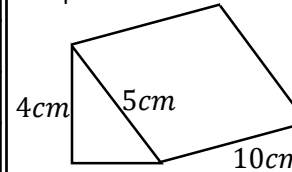5) Find the Missing angle x. From these regular polygons.

6) Expand and Simplify
$$5(x + 4) - 3(x - 2)$$

7) Which company is cheaper for the price of a TV?

Wonder	Zibidee
$\frac{1}{8}$ off £142	15% off £140

8) Calculate the volume of the shape.

4cm 5cm 10cm

9) Express 0.77777 as a fraction.

10) 80 students went on a school trip. They went to London or Paris.
23 boys and 19 girls went to London.
14 boys went to Paris.
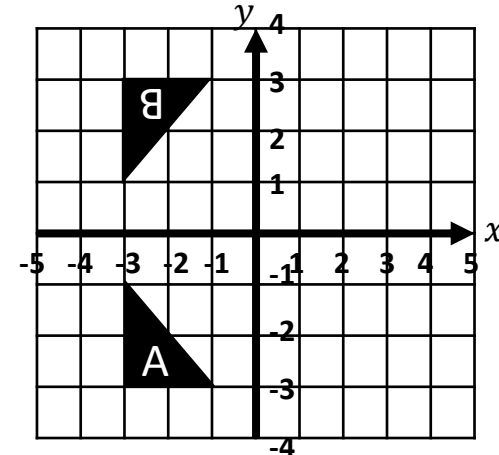What is the probability a child went to London?

11) Expand and simplify
$$(x + 3)(x - 5)$$

12) List two criticisms of the questionnaire.
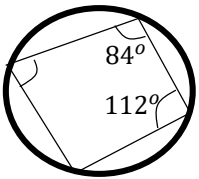
How often do you go to the cinema?

☐ 1-2   ☐ 2-3   ☐ 3-4
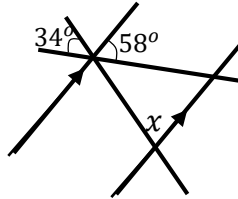
13) Describe the transformation of A to B.

Enlarge B by a scale factor of 2 from a centre (-4, 4) to make shape C.

14) Find angle x.

84°
112°

15) Calculate the size of angle x.

34° 58°
x

16) What is the equation of the line Parallel to $y = 3x + 2$ which passes through the point (2,18).

Challenge
M is a midpoint of the line $\overrightarrow{OA}$ and N is a midpoint of the line $\overrightarrow{OB}$.

Show the length $\overrightarrow{BM}$

Show the length $\overrightarrow{AB}$.

A
a
O b B