Year 7 Review 1A

1 Round the following numbers to one decimal place.
a) 0.872 **b)** 4.89 **c)** 19.38

2 Re-write this calculation using brackets to make it true.
$7 + 3 \times 2 - 6 = 14$

3 Simplify the following expressions using the correct order of operations.
a) $2x + 4(x - 7) - 5x$
b) $-3r + 4 - (2r - 3) + 8r$

4 Write an expression for the area of a rectangle 7 units long and $(x - 3)$ units wide.

5 Write an expression for the perimeter of the rectangle in question 4.

6 A square has side length $(t - 7)$ units. Write an expression for its perimeter.

7 Draw a trapezium with one line of symmetry.

8 Draw a regular octagon.
a) Write down how many lines of symmetry it has.
b) Write down its order of rotational symmetry.

9 Convert each of these measures to the units shown in brackets.
a) 7.142 kg (g) **b)** 12 568 m (km) **c)** 4.12 litres (m*l*)

10 A fitness club carries out a survey to find out the ages of its members. Here are the results.

28	18	33	17	49	42	50	19	21	23	21	16
38	55	62	41	17	19	23	46	38	42	35	65
18	42	63	48	19	67	17	23	36	48	54	60

a) Make a grouped tally and frequency table using the age groups 1–10, 11–20, 21–30, etc.
b) Draw a frequency diagram of the data.
c) Draw some conclusions from your frequency diagram.
d) The club wishes to know what are the best times for social events, competitions, club nights, etc. Design a questionnaire to be given to the members.

Year 7 Review 1B

1 Round the following numbers to one decimal place.
a) 0.84 **b)** 4.99 **c)** 29.88

2 Re-write this calculation using brackets to make it true.
$3 \times 2 \times 6 + 2 = 48$

3 Simplify the following expressions using the correct order of operations.
a) $3x + 2(x - 7) - x$
b) $-8r + 4 - (5r - 3) + r$

4 Write an expression for the area of a rectangle 9 units long and $(2x - 7)$ units wide.

5 Write an expression for the perimeter of the rectangle in question 4.

6 A square has side length $(p - 1)$ units. Write an expression for its perimeter.

7 Draw a triangle with one line of symmetry.

8 Draw a regular hexagon.
a) Write down how many lines of symmetry it has.
b) Write down its order of rotational symmetry.

9 Convert each of these measures to the units shown in brackets.
a) 2.3 kg (g) **b)** 5568 m (km) **c)** 0.42 litre (m*l*)

10 A golf club carries out a survey to find out the ages of its members. Here are the results.

28	68	57	79	42	50	19	21	23	21	56	16
38	55	62	71	27	49	63	46	68	42	35	65
18	72	63	48	69	67	17	43	36	48	54	60

a) Make a grouped tally and frequency table using the age groups 1–10, 11–20, 21–30, etc.
b) Draw a frequency diagram of the data.
c) Draw some conclusions from your frequency diagram.
d) The club wishes to know if fees should be raised to make improvements to the golf course, and to find out why the club restaurant is not used much at certain times of the week and in certain months of the year. Design a questionnaire to be given to the members.