Question 1

Work out $2\dfrac{1}{8} \div 6\dfrac{1}{2}$
simplifying your answer if possible.

Question 2

Find the nth term of this sequence:
7, 8, 9, 10, ...

Question 3

A bag has 3 purple, 3 yellow, and
2 orange beads.
You pick one at random, note
the colour and put it back.
You then pick one again.
Find the probability of picking
two different coloured beads.

Question 4

Solve $2\,x + 7 = -10\,x + 67$

Question 1

Work out $2\dfrac{1}{8} \div 6\dfrac{1}{2}$

simplifying your answer if possible.

$$2\dfrac{1}{8} \div 6\dfrac{1}{2} = \dfrac{17}{8} \div \dfrac{13}{2}$$

$$= \dfrac{17}{8} \times \dfrac{2}{13} = \dfrac{34}{104} = \dfrac{17}{52}$$

Question 2

Find the nth term of this sequence:

7, 8, 9, 10, ...

$$n + 6$$

Question 3

A bag has 3 purple, 3 yellow, and 2 orange beads.
You pick one at random, note the colour and put it back.
You then pick one again.
Find the probability of picking two different coloured beads.

$$\dfrac{21}{32}$$

Question 4

Solve $2\,x + 7 = -10\,x + 67$

$$x = 5$$