1. (a) Write $0.000\,007\,13$ in standard form

                                                          (a) ....

2. (a) Write 580×10^{10} in standard form

                                                          (a) ....

3. (a) Work out the value of $2 \times 10^7 \times 6 \times 10^8$

       Give your answer in standard form.

                                                          (a) ....

4. (a) Work out $\dfrac{1}{3} \times \dfrac{3}{5}$
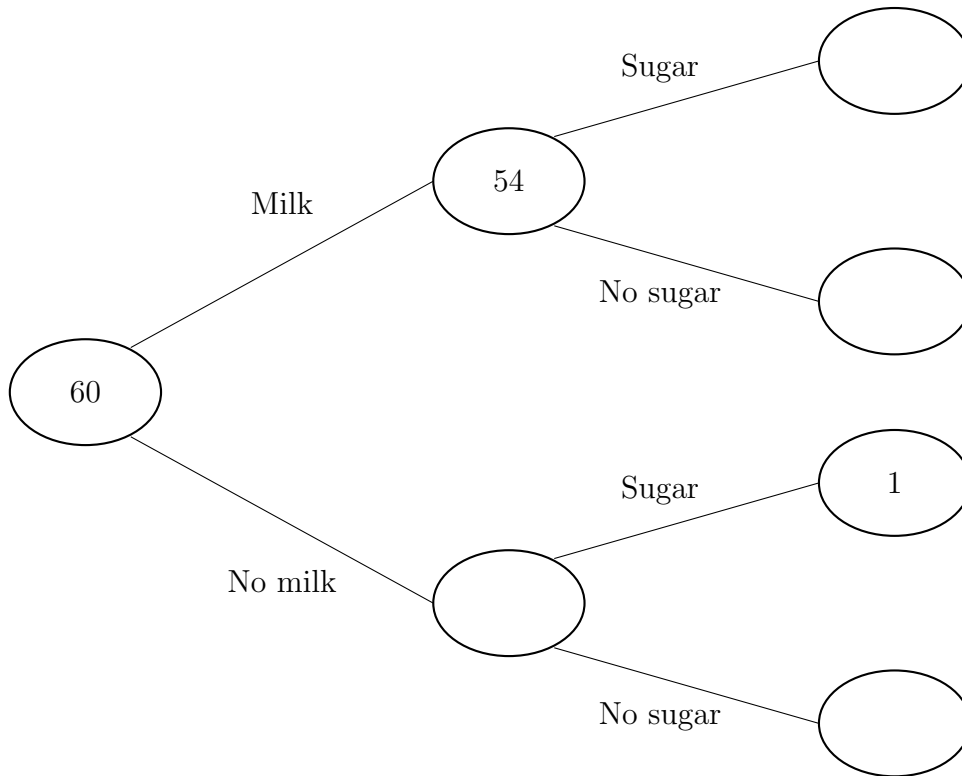
       Give your answer in its simplest form.

                                                          (a) ....

5. (a) Work out $\dfrac{3}{4} \div \dfrac{7}{8}$

       Give your fraction in its simplest form.

                                                          (a) ....

6. Here is an incomplete frequency tree about coffees served in a cafe one day.

   50 of the coffees sold had no sugar.

   Use this information to complete the frequency tree.

Stuck? try these first

7. (a) Write 8.05×10^7 as an ordinary number

(a) ....

8. (a) Write 6.05×10^{-3} as an ordinary number

(a) ....

9. (a) Write $210\,000$ in standard form

(a) ....

10. Write these numbers in order of size.
    Start with the smallest number.

$$0.582 \times 10^4 \qquad 582 \times 10^3 \qquad 58.2 \qquad 5.82 \times 10^{-1}$$

....

11. (a) Work out $\quad \dfrac{1}{2}$ x $\dfrac{3}{4}$

(a) ....

12. (a) Work out $\quad \dfrac{3}{5} \div \dfrac{2}{3}$

(a) ....

13. Complete $\quad \dfrac{1}{4} = \dfrac{}{12}$

You may use this dotted paper to draw fractions
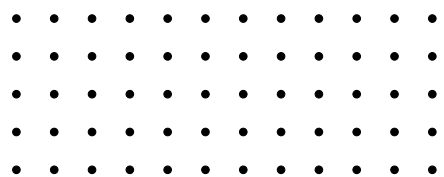
14. Write $\dfrac{10}{100}$ in its simplest form.

14. . . . .

15. Write $\dfrac{27}{36}$ in its simplest form.

15. . . . .

16. Write $\dfrac{21}{33}$ in its simplest form.

16. . . . .

17. 180 students are asked if they have a pet at home.

153 of the students have a pet.

88 of the students are boys.

13 of the girls have no pet.

Use this information to complete the table below.

	Have a pet	Have **no** pet	Total
Girls			
Boys			
Total			180

18. 30 students in a form group have early lunch.

   20 of these students have school meals.

   6 of these students have packed lunch.

   8 of the students who have school meals are boys.

   2 of the students who have packed lunch are girls.

   1 boy goes home for lunch.

   (a) Use this information to complete the frequency tree.
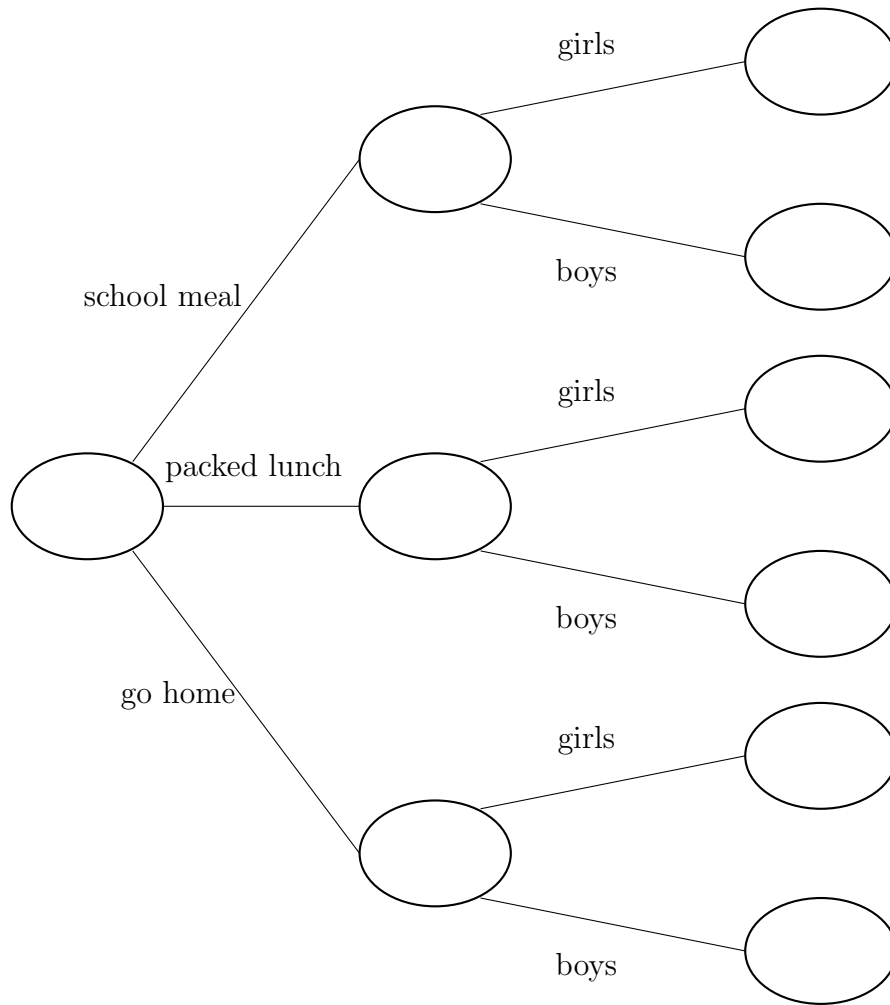
   One of the students from this form group is chosen at random.

   (b) Work out the probability of that this student is a girl.

   (b) ....