## Holiday Homework

Solve the following equations and check your results.

1) $\frac{x}{2}-\frac{1}{5}=\frac{x}{3}+\frac{1}{4}$
2) $\frac{n}{2}-\frac{3 n}{4}+\frac{5 n}{6}=2$
3) $\frac{3 y+4}{2-6 y}=\frac{-2}{5}$
4) $\frac{7 y+4}{y+2}=\frac{-4}{3}$
5) Find the value of ' $m$ ' for which (7) $)^{m+1} \div(7)^{-5}=(7)^{10}$.
6) Simplify: $\frac{3^{-5} \times 10^{-5} \times 625}{5^{-7} \times 6^{-5}}$
7) Find the value $\left[\frac{1}{2}\right]^{-2}+\left[\frac{1}{3}\right]^{-2}+\left[\frac{1}{4}\right]^{-2}$
8) The angles of a quadrilateral are in the ratio $1: 2: 3: 4$. What are the measures of the four angles?
9) Adjacent sides of a rectangle are in the ratio 5:12, if the perimeter of the rectangle is 34 cm . Find the measure of all the sides.
10) (a) Find the value of ' $x$ ':

(b) Find the value of ' $x$ ' and ' $y$ ':

