Rational and Irrational numbers Part 2

4. Simplify the following expressions.

   (a) $\sqrt{504}$

   (b) $\sqrt{864}$

5. Suppose $\sqrt{2} = a$, $\sqrt{3} = b$. Express $\sqrt{96} - \sqrt{150}$ in terms of a and b without root sign.

6. Simplify the following expressions.

   (a) $\sqrt{48} + \sqrt{108}$

   (b) $\dfrac{9\sqrt{3}}{5} - 2\sqrt{3}$

7. (a) Rationalize $\dfrac{4}{\sqrt{5}}$.

   (b) Simplify $\dfrac{4}{\sqrt{5}} - \dfrac{3\sqrt{5}}{5}$.