№8. $\lim\limits_{x\to 2} \frac{\sqrt[3]{4x}-2}{\sqrt{2+x}-\sqrt{2x}} = \left\{\frac{0}{0}\right\} = \lim\limits_{x\to 2} \frac{(\sqrt[3]{4x}-2)(\sqrt{2+x}+\sqrt{2x})}{2+x-2x} =$

$= \lim\limits_{x\to 2} \frac{(\sqrt[3]{4x}-2)(\sqrt{2+x}+\sqrt{2x})}{2-x} = \lim\limits_{x\to 2} \frac{(4x-8)(\sqrt{2+x}+\sqrt{2x})}{(2-x)((\sqrt[3]{4x})^2+2\sqrt[3]{4x}+4)} =$

$= \lim\limits_{x\to 2} \frac{-4(2-x)(\sqrt{2+x}+\sqrt{2x})}{(2-x)((\sqrt[3]{4x})^2+2\sqrt[3]{4x}+4)} = \frac{-4\cdot(2+2)}{(4+4+4)} = \frac{-4\cdot 4}{4\cdot 3} = -\frac{4}{3}.$