

$$a) \frac{3^{3+2x} + 3^{2x}}{3^{2+x} - 3^x} = \frac{3^3 \cdot 3^{2x} + 3^{2x}}{3^2 \cdot 3^x - 3^x} =$$

$$= \frac{3^x \cdot 3^x \cdot 3^{2x}}{3^x (3^2 - 1)} = 3^x \cdot \frac{28}{8} = 3^x \cdot \frac{7}{2}$$

$$b) \frac{2^{3x+4} - 16}{2^{6x} - 2^{3x}} = \frac{2^{3x} \cdot 2^4 - 2^4}{2^{3x} \cdot 2^{3x} - 2^{3x}} =$$

$$= \frac{2^4 \cdot (2^{3x} - 1)}{2^{3x} \cdot (2^{3x} - 1)} = \frac{2^4}{2^{3x}} = 2^{4-3x}$$