

$$1) \sqrt{28x^9} = \sqrt{4 \cdot 7 \cdot x^8 \cdot x} = 2x^4 \sqrt{7x}$$

$$\sqrt{\frac{7m^3}{36}} = \sqrt{\frac{7m^2 m}{6^2}} = \frac{m}{6} \sqrt{7m}$$

$$0,7\sqrt{300} = 0,7 \cdot \sqrt{100 \cdot 3} = 0,7\sqrt{10^2 \cdot 3} = 0,7 \cdot 10\sqrt{3} = 7\sqrt{3}$$

$$\sqrt{112} = \sqrt{16 \cdot 7} = \sqrt{4^2 \cdot 7} = 4\sqrt{7}$$

$$2) 4\sqrt{3} = \sqrt{4^2 \cdot 3} = \sqrt{16 \cdot 3} = \sqrt{48}$$

$$5\sqrt{\rho} = \sqrt{5^2 \cdot \rho} = \sqrt{25\rho}$$

$$-7\sqrt{2} = -\sqrt{7^2 \cdot 2} = -\sqrt{49 \cdot 2} = -\sqrt{98}$$

$$6\sqrt{\frac{1}{6}y} = \sqrt{36 \cdot \frac{1}{6}y} = \sqrt{6y}$$

$$3) \frac{2}{\sqrt{3}} = \frac{2 \cdot \sqrt{3}}{\sqrt{3} \cdot \sqrt{3}} = \frac{2\sqrt{3}}{3}$$

$$\frac{5+\sqrt{5}}{\sqrt{5}} = \frac{(5+\sqrt{5}) \cdot \sqrt{5}}{\sqrt{5} \cdot \sqrt{5}} = \frac{5\sqrt{5}+5}{5} = \frac{5(\sqrt{5}+1)}{5} = \sqrt{5}+1$$

$$\frac{a}{\sqrt{6}} = \frac{a \cdot \sqrt{6}}{\sqrt{6} \cdot \sqrt{6}} = \frac{a\sqrt{6}}{6}$$

$$\frac{15}{\sqrt{6}-1} = \frac{15 \cdot (\sqrt{6}+1)}{(\sqrt{6}-1)(\sqrt{6}+1)} = \frac{15\sqrt{6}+15}{6-1} = \frac{15(\sqrt{6}+1)}{5} = 3(\sqrt{6}+1)$$

$$\frac{2}{\sqrt{11}+\sqrt{7}} = \frac{2 \cdot (\sqrt{11}-\sqrt{7})}{(\sqrt{11}+\sqrt{7})(\sqrt{11}-\sqrt{7})} = \frac{2(\sqrt{11}-\sqrt{7})}{11-7} = \frac{2(\sqrt{11}-\sqrt{7})}{4} = \frac{\sqrt{11}-\sqrt{7}}{2}$$

$$4) (\sqrt{2}-3\sqrt{5})^2 + \sqrt{360} = 2 - (2 \cdot \sqrt{2})(3\sqrt{5}) + (3\sqrt{5})^2 + \sqrt{36 \cdot 10} =$$

$$= 2 - 6\sqrt{2 \cdot 5} + 9 \cdot 5 + \sqrt{6^2 \cdot 10} =$$

$$= 2 - 6\sqrt{10} + 45 + 6\sqrt{10} =$$

$$= 2 + 45 = 47$$