1. $\sqrt{112} = x\sqrt{7}$. Now $\sqrt{112} = \sqrt{16 \times 7} = \sqrt{4 \times 4 \times 7} = 4\sqrt{7}$. Hence $x = 4$

2. $\sqrt{32} = z\sqrt{2}$. Now $\sqrt{32} = \sqrt{16 \times 2} = \sqrt{4 \times 4 \times 2} = 4\sqrt{2}$. Hence $z = 4$

3. $\sqrt{18} = z\sqrt{2}$. Now $\sqrt{18} = \sqrt{9 \times 2} = \sqrt{3 \times 3 \times 2} = 3\sqrt{2}$. Hence $z = 3$