

**Samples                      Equations with square roots SOLUTIONS**

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**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  $z = 3$