Simplifying Square Roots

1. Simplify each square root.
(similar to p.542 #22)

$$\sqrt{12}$$

2. Simplify each square root.
(similar to p.542 #30)

$$\sqrt{72}$$

3. Simplify each square root.
(similar to p.542 #42)

$$\frac{4-\sqrt{20}}{2}$$

4. Simplify each square root. Assume all variables represent nonnegative real numbers.
(similar to p.542 #44)

$$\sqrt{y^{10}}$$

5. Simplify each square root. Assume all variables represent nonnegative real numbers.
(similar to p.542 #52)

$$\sqrt{75y^{13}}$$

6. Simplify each square root. Assume all variables represent nonnegative real numbers.
(similar to p.542 #54)

$$\sqrt{80n^{21}}$$

7. Simplify each square root. Assume all variables represent nonnegative real numbers.
(similar to p.542 #56)

$$\sqrt{72a^{10}b^{7}}$$

8. Simplify each square root. Assume all variables represent positive real numbers.
(similar to p.542 #60)

$$\sqrt{\frac{4}{25}}$$

9. Simplify each square root. Assume all variables represent positive real numbers.
(similar to p.542 #62)

$$\sqrt{\frac{17}{16}}$$

10. Simplify each square root. Assume all variables represent positive real numbers.
(similar to p.542 #66)

$$\sqrt{\frac{3}{x^{2}}}$$

11. Simplify each square root. Assume all variables represent positive real numbers.
(similar to p.542 #70)

$$\sqrt{\frac{40a^{5}b^{8}}{c^{4}}}$$

12. Simplify each square root. Assume all variables represent positive real numbers. (similar to p.542 #76)

$$\sqrt{\frac{100m^{21}}{9m^{10}}}$$