LESSON PRACTICE

4A

Add or subtract the radicals.

1. $3\sqrt{2} + 6\sqrt{2} =$

2. $5\sqrt{7} - 2\sqrt{5} =$

3. $6\sqrt{x} - 8\sqrt{x} =$

4. $4\sqrt{3} + 16\sqrt{3} =$

Multiply or divide the radicals.

5. $(2\sqrt{5})(3\sqrt{6}) =$

6. $\frac{10\sqrt{5}}{2\sqrt{5}} =$

7. $(9\sqrt{x})(2\sqrt{y}) =$

8. $\frac{16\sqrt{20}}{8\sqrt{10}} =$

Simplify.

9. $\frac{5}{\sqrt{2}} =$

10. $\frac{4\sqrt{6}}{\sqrt{3}} =$

11. $\frac{\sqrt{12}}{\sqrt{6}} =$

12. $\frac{9\sqrt{27}}{\sqrt{2}} =$

Simplify, and then add or subtract.

13. $\frac{2}{\sqrt{5}} + \frac{4}{\sqrt{6}} =$

14. $-\sqrt{2}\left(3\sqrt{12} + 2\sqrt{18}\right) =$

15. $\frac{X}{\sqrt{2}} + \frac{X}{\sqrt{7}} =$

16. $4\left(2\sqrt{10} - \sqrt{20}\right) =$

SYSTEMATIC REVIEW

4E

Simplify.

1. $X\sqrt{49X^2Y^2} =$

2. $4\sqrt{6} + 11\sqrt{6} =$

3. $(5\sqrt{X})(6\sqrt{Y}) =$

4. $\sqrt{6}(\sqrt{7} + 4\sqrt{6}) =$

5. $\frac{10\sqrt{63}}{\sqrt{7}} =$

6. $\frac{\sqrt{128}}{\sqrt{8}} =$

7. $\sqrt{200} =$

8. $\frac{1}{3}\sqrt{72} =$

9. $\frac{8}{\sqrt{10}} =$

10. $\frac{10}{\sqrt{7}} + \frac{16}{\sqrt{11}} =$

Solve using scientific notation.

11. $(.00034)(.00000026) =$

12. $(77{,}000)(740{,}000{,}000) =$

13. $(490{,}000) \div (.007) =$

14. $\frac{(28{,}000{,}000)(210{,}000{,}000)}{(.98)} =$

Simplify, and combine like terms when possible.

15. $\frac{2Q^{-1}R^{0}T^{2}}{T^{3}R^{-1}Q^{2}} - \frac{5Q^{2}R^{-3}T^{4}}{T^{1}R^{-2}Q^{3}} + \frac{Q^{5}R^{3}T^{4}}{RRQ^{2}} =$

Solve.

16. $\frac{X}{3} - \frac{X}{5} = \frac{2}{15}$

Simplify.

17. $(7AX^3Y^2)(-X^2Y^{-2}) =$

18. $135A^2B^5C^{-3} \div 15A^{-2}B^{-3} =$

Solve for X.

19. $\frac{3X}{8} = 11 - 2$

20. $30 - .15X = .6X - 15$