LESSON PRACTICE

9A

Expand.

1. $(X + 3)^2$

2. $(A - 3)^2$

3. $(3X + 4)^2$

4. $(2X + 1)^2$

Find the binomial or square roots of the trinomial.

5. $X^2 + 8X + 16$

6. $X^2 - 18X + 81$

7. $A^2 + 16A + 64$

8. $A^2 - 16A + 64$

Expand.

9. $(X + 5)^3$

10. $(3X - 2)^3$

11. $(2A + 2B)^3$

12. $(X - 1)^3$

13. $(Y - 1/4)^3$

14. $(2R + 3)^3$

Write the coefficients of Pascal's triangle for the first five powers.

15.

1

____ ____

____ ____ ____

____ ____ ____ ____

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____ ____ ____ ____ ____ ____

Expand.

1. $(X + 8)^2$

2. $(4X + 1)^2$

Find the binomial roots of the trinomial.

3. $X^2 + 8X + 16$

4. $9X^2 + 12X + 4$

Expand.

5. $(X + 6)^3$

6. $(2X + 5)^3$

7. $(X + 4)^3$

8. $(X - 2/3)^3$

9. The conjugate of $6 + 3\sqrt{-9}$ is _____?

10. What are the factors of $100X^2 - 83$?

Simplify so that there are no imaginary numbers or radicals in the denominator.

11. $\dfrac{5\sqrt{7}}{2\sqrt{7}-3}$

12. $\dfrac{4}{10-7i}$

Simplify, and combine like terms when possible.

13. $(10i^2)(\sqrt{-75})$

14. $(2i)^3$

Simplify.

15. $(9^{1/2})^{-5}$

16. $\left(\sqrt[3]{x^9}\right)^{-2}$

Solve and check the answer.

17. $5x^2 - 3x = 0$

18. $\dfrac{x^2+5x}{25-x^2} \div \dfrac{x+5}{10x-50} =$

19. $3\sqrt{\dfrac{2}{7}} - 7\sqrt{\dfrac{3}{x}} =$

20. $\dfrac{1+\dfrac{4-5x}{2}}{\dfrac{x+3}{4}}$