ADNOC SCHOOLS
Grade 8 Algebra 1

Worksheet 10.4

NAME _____ CLASS _____ DATE: / /

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1. Expand: $(x-5)^2$
a. $x^2+10x+25$
b. x^2-25
c. $x^2-10x+25$
d. $x^2-5x+25$

2. Expand: $(5x-4)^2$
a. $25x^2-20x+16$
b. $25x^2-40x+16$
c. $10x^2-40x+16$
d. $25x^2+40x+16$

3. Multiply: $(x-8)(x+8)$
a. x^2+64
b. x^2-16
c. x^2+16
d. x^2-64

4. Expand: $(6x-4)^2$
a. $36x^2+48x+16$
b. $36x^2-48x+16$
c. $12x^2-48x+16$
d. $36x^2-24x+16$

5. Expand: $(2x+7)^2$
a. $4x^2+28x+49$
b. $4x^2+14x+49$
c. $2x^2+28x+49$
d. $4x^2+28x+14$

6. Multiply: $(x-3)(x-3)$
a. x^2+6x+9
b. x^2-9
c. x^2-6x+9
d. x^2-3x+9

9. Expand: $(2x-\frac{3}{2})^2$
a. $4x^2-6x+\frac{9}{4}$
b. $4x^2-3x+\frac{9}{4}$
c. $2x^2-6x+\frac{9}{4}$
d. $4x^2+6x+\frac{9}{4}$

8. Expand: $(x+\frac{1}{2})^2$
a. $x^2+\frac{1}{2}x+\frac{1}{4}$
b. $x^2+x+\frac{1}{4}$
c. $x^2+x+\frac{1}{2}$
d. $x^2+\frac{1}{4}$

7. Multiply: $(3x+5)(3x-5)$
a. $9x^2+25$
b. $6x^2-25$
c. $9x^2-10x$
d. $9x^2-25$

12. Expand: $(\sqrt{x}+4)^2$
a. $x+4\sqrt{x}+16$
b. $\sqrt{x}+8x+16$
c. $x+16$
d. $x+8\sqrt{x}+16$

11. Expand: $(\sqrt{3}x+2)^2$
a. $3x^2+2\sqrt{3}x+4$
b. $6x^2+4\sqrt{3}x+4$
c. $3x^2+4x+4$
d. $3x^2+4\sqrt{3}x+4$

10. Multiply: $(x-\sqrt{5})(x+\sqrt{5})$
a. x^2+5
b. $x^2-\sqrt{5}$
c. x^2-5
d. $x^2+\sqrt{5}$

16. Expand: $(7x-2)^2$
a. $49x^2-14x+4$
b. $14x^2-28x+4$
c. $49x^2+28x+4$
d. $49x^2-28x+4$

13. Expand: $(\frac{x}{2}-3)^2$
a. $\frac{x^2}{2}-3x+9$
b. $\frac{x^2}{4}-3x+9$
c. $\frac{x^2}{4}-6x+9$
d. $\frac{x^2}{4}-6x+3$

14. Multiply: $(4x+\sqrt{2})(4x-\sqrt{2})$
a. $16x^2+2$
b. $8x^2-2$
c. $16x^2-2$
d. $16x^2-\sqrt{2}$

17. Expand: $(x+\sqrt{7})^2$
a. $x^2+\sqrt{7}x+7$
b. $x^2+2\sqrt{7}x+7$
c. x^2+2x+7
d. x^2+7

18. Expand: $(3x-\frac{1}{3})^2$
a. $9x^2-x+\frac{1}{9}$
b. $3x^2-2x+\frac{1}{9}$
c. $9x^2+2x+\frac{1}{9}$
d. $9x^2-2x+\frac{1}{9}$

15. Multiply: $(x-\frac{5}{3})(x+\frac{5}{3})$
a. $x^2+\frac{25}{9}$
b. $x^2-\frac{10}{3}$
c. $x^2+\frac{10}{3}$
d. $x^2-\frac{25}{9}$

LIVEWORKSHEETS