

Name: _____

Remarkable Identities

Find each product.

1) $(x+6)^2$

2) $(1+x)^2$

3) $(7x+5y)^2$

4) $(10+20f)^2$

5) $(0.4m+2.2n)^2$

6) $(2.3m+3.5)^2$

7) $\left(\frac{1}{2}x+\frac{3}{4}y\right)^2$

8) $\left(\frac{a}{2}+\frac{2b}{5}\right)^2$

9) $(x-10)^2$

10) $(1-2x)^2$

11) $(2x-5y)^2$

12) $(11c-4d)^2$

13) $(0.3m-0.2n)^2$

14) $(1.5t-1.5)^2$

15) $\left(\frac{1}{4}x-\frac{1}{4}y\right)^2$

16) $\left(\frac{a}{3}-\frac{3b}{2}\right)^2$

17) $(x-9)(x+9)$

18) $(12+2x)(12-2x)$

19) $(5m+7y)(5m-7y)$

20) $(11c-4d)(11c+4d)$

21) $(0.7-0.2h)(0.7+0.2h)$

22) $\left(\frac{1}{4}x-\frac{1}{5}y\right)\left(\frac{1}{4}x+\frac{1}{5}y\right)$

23) $\left(\frac{4a}{5}+\frac{b}{4}\right)\left(\frac{4a}{5}-\frac{b}{4}\right)$

24) $(x^4-2)(x^4+2)$

25) $(5m^2+6y^3)(5m^2-6y^3)$

26) $(5+2x^3)^2$

27) $(3a^2+4b^3)^2$

28) $(x^4-2y^2)^2$

29) $(a+b)^3$

30) $(a-b)^4$

31) The length of rectangular field is $x+4$ and the width is $x-4$. Write an algebraic expression for the area of the rectangular field.

32) A square has a side of measure $(x+5)$. Write an algebraic expression for its area.