

Algebra 1
8.5-8.7 Quiz Review

Name: Process Key

Factor the expression completely.

1. $x^2 + 5x - 14$

S + P

2. $x^2 - 12x - 64$

S + P

3. $h^2 - 11h + 30$

S + P

4. $w^2 + 3w - 28$

S + P

5. $x^2 - 81$

Think....

$x^2 + \underline{0x} - 81$

S + P

6. $49 + y^2 + 14y$

S.F. 1st

S + P

7. $4x^2 - 20x + 25$

S + D

8. $4x^2 - 25$

Think

$4x^2 + \underline{0x} - 25$

S + D

9. $2x^2 + 5x + 3$

S + D

10. $6p^2 + 14p + 4$

G.C.F.

then

S + D

11. $4x^2 + 15x + 9$

S + D

12. $63g^6 - 54g^2$

Binomial

Solve the equation.

13. $(x + 8)(x - 3) = 0$

0 0

14. $(a + 7)^2 = 0$

$(a + 7)(a + 7) = 0$

think

15. $x^2 - 4x + 3 = 0$

S + P

16. $x^2 - 5x = 14$

S.F.

+ S.P.

17. $0 = b^3 - 100b$

G.C.F. + S + P

How many solutions?

18. $3x^2 + 4 = 8x$

S.F.

S + D.

19. $m^2 - 6m = -9$

S.F.

S.P.

20. $x^2 - 25 = 0$

Think

$x^2 = 25$

OR

$x^2 + \underline{0x} - 25 = 0$

21. $3q^2 - 3q = 6$

S.F.

G.C.F.

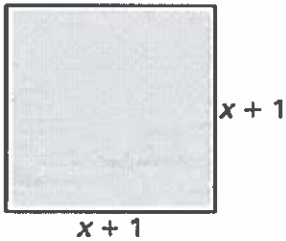
S.P.

BONUS PROBLEMS:

22. Write a quadratic trinomial equation in standard form that has the given solutions: -1 and 3.

Think $(\quad)(\quad) = 0$

23. A) Find an expression for the area of the figure. B) Find an expression for the perimeter of the figure



(A) Area of a square...

(B) Perimeter so add/subtract/multiply or divide?