SWBAT evaluate algebraic expressions.
Evaluate each of the following for the given value. Show all work to receive full credit.

17. $6x + 4$; $x = -1$

$6(-1) + 4$
$-6 + 4$
$\boxed{-2}$

18. $-3(2x + 9)$; $x = 2$

$-3(2(2) + 9)$
$-3(4 + 9)$
$-3(13)$
-39

19. $4x^2 - 2x + 5$; $x = 3$

$4(3)^2 - 2(3) + 5$
$4(9) - 6 + 5$
$36 - 6 + 5$
$30 + 5$
35

SWBAT solve quadratic equations by factoring using the grouping method.
Factor each of the following. Show all work to receive full credit.

20. $x^2 + 13x + 30$

$a = 1, b = 13, c = 30$

ac	b
$+30$	$+13$
$1,30$	31 ✗
$2,15$	17 ✗
$3,10$	13 ✓

$\boxed{(x+3)(x+10)}$

21. $x^2 - 5x + 6$

$a = 1, b = -5, c = 6$

ac	b
$+6$	-5
$-1, -6$	$-7x$
$-2, -3$	-5 ✓

$\boxed{(x-2)(x-3)}$

22. $3x^2 - 10x - 8$

$a = 3, b = -10, c = -8$

ac	b
-24	-10
$1, -24$	$-23x$
$2, -12$	-10 ✓

$(3x^2 - 12x)(+2x - 8)$
$3x(x-4) + 2(x-4)$
$\boxed{(x-4)(3x+2)}$

Solve each of the following by factoring. Show all work to receive full credit.

23. $x^2 + 5x - 24 = 0$

$a = 1, b = 5, c = -24 =$

ac	b
-24	$+5$
$-1, 24$	$23x$
$-2, 12$	$10x$
$-3, 8$	5 ✓

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

$x - 3 = 0$ $x + 8 = 0$
$\boxed{x = 3}$ $,$ $\boxed{x = -8}$

24. $5x^2 + 17x + 6 = 0$

$a = 5, b = 17, c = 6$

$5x^2 + 15x + 2x + 6 = 0$

$5x(x+3) + 2(x+3) = 0$
$(x+3)(5x+2) = 0$

ac	b
30	17
$1, 30$	31 ✗
$2, 15$	17 ✓

$x + 3 = 0$ $5x + 2 = 0$
$\boxed{x = -3}$ $\dfrac{5x}{5} = \dfrac{-2}{5}$

$\boxed{x = -\dfrac{2}{5}}$