Whittier Tech

Grade 11:
CP1/2 Algebra II
Summer Project

Name_____

Summer Packet

Date_____ Period_____

Evaluate each expression.

1) $(-1) + (-5)$

2) $3 - 4$

3) $3 + (-4)$

4) $2 - 5 - (-2) + 4$

5) $(-4) - (-2) + (-8) + 1$

6) $7 + 6 + 6 - (-1)$

Find the midpoint of the line segment with the given endpoints.

7) $(0, 8), (6, 2)$

8) $(-3, 8), (3, -3)$

9) $(5, 10), (5, -1)$

Solve each equation.

10) $-12 + x = 5$

11) $p + 20 = 32$

12) $-119 = -17k$

13) $7(-8x + 5) = -245$

14) $-7(6n - 1) = -161$

15) $-5(3 + 3r) = -120$

Factor each completely.

16) $5x^2 + 45x$

17) $n^2 + 6n - 16$

18) $5r^2 - 45r + 70$

19) $9m^2 - n^2$

20) $4x^2 - 12xy + 9y^2$

21) $9x^2 - 24xy + 16y^2$

Find the slope of the line through each pair of points.

22) $(-10, 20), (17, -4)$

23) $(8, 9), (19, 9)$

24) $(-9, -10), (3, 7)$

Simplify each expression.

25) $(2 + 5n + 8n^4) - (5n^3 - 8n - 2)$

26) $(2x^3 - 3 - 4x^2) + (7x^3 + 6x^2 - 4x)$

27) $(4 - 7m^4 + 3m^3) + (2m^4 - 7m^3 - 6m^2)$

Find each product.

28) $(7n - 8)(5n - 4)$

29) $(3v - 7)(2v + 6)$

30) $(3n - 2)(7n - 2)$