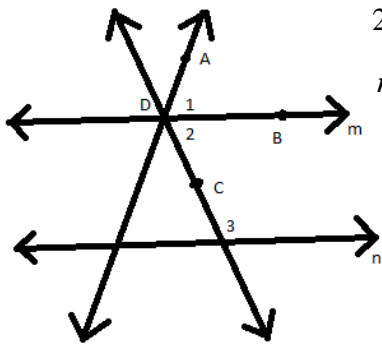


Name: _____
 Date: _____
 Class: _____

Geometry
 Unit 2
 HW 2-5

1) Solve: $14x + 12 = -2x^2$



2) If \overline{DB} bisects $\angle ADC$, $m\angle 1 = x^2 + 3x - 2$,
 $m\angle 2 = 8x + 4$, and $m\angle 3 = 20x + 8$ is $\vec{m} \parallel \vec{n}$?

3) If $\vec{m} \parallel \vec{n}$, $m\angle 2 = x^2 - 24$, and $m\angle 3 = 10x + 33$ find x.

4) Find the distance between (-2, 4) and (6, -1).

5) If the midpoint of \overline{AB} is point Z, determine the coordinates of Z if A (x + 2, z - 7) and B (3x + 9, 2z - 5).

6) Find the equation of a line that is parallel to a line passing through $(-2, 5)$ and $(5, -1)$. The new line will pass through $(4, 7)$.

7) If segment WN has endpoints $(2, 8)$ and $(12, 23)$, find point S so that $WS:SN = 2:1$

8) Solve using complete the square: $2x^2 + 7x - 10 = 0$