Valentine's Day Word Problems (D)

Name: _____   Date: _____

Solve each problem in the space provided.

7. Everyone in Elias's class of 22 students got a Valentine from every other student. No one gave themself a Valentine. How many Valentines were given out?

8. Gabriella arranged her Valentine's candy hearts by color. She found that there were 6 different colors. There were two fewer purple candy hearts than there were red hearts. There were six more green hearts than orange hearts. There was an equal number of purple, green and white hearts, and the white hearts beat out the yellow hearts by 15. If there were 281 candy hearts all together, how many purple, red, green, orange, white and yellow hearts were there?

Name: _____   Date: _____

Solve each problem in the space provided.

7. Everyone in Elias's class of 22 students got a Valentine from every other student. No one gave themself a Valentine. How many Valentines were given out?

Each student got 21 Valentines, so
22 students $\times$ 21 Valentines per student $=$ 462 Valentines were given out.

8. Gabriella arranged her Valentine's candy hearts by color. She found that there were 6 different colors. There were two fewer purple candy hearts than there were red hearts. There were six more green hearts than orange hearts. There was an equal number of purple, green and white hearts, and the white hearts beat out the yellow hearts by 15. If there were 281 candy hearts all together, how many purple, red, green, orange, white and yellow hearts were there?

$p = g = w$
$r = p + 2$
$o = p - 6$
$y = p - 15$
$3p + p + 2 + p - 6 + p - 15 = 281$
$p = 50$
Substitute for the rest. There were 50 purple, 50 green, 50 white, 52 red, 44 orange and 35 yellow candy hearts.