Math Models Nine Week Final Review

Simplify Each of the Following:

1. 2( 5 – 7 )³
2. [ 3² - 2(6 – 5) ]

Solve each of the following equations

1. 3(y + 7) = 2y – 5
2. 6x + x – 0.9 = 6x + 0.9

Express the following ratios in simplest form

1. 4hr:1day
2. 10ft:160 in

Find each unit rate

1. 7.5 lbs for six people
2. 50 eggs from 10 chickens

Solve the following proportions for x

1. 7/12=3x/10
2. (x – 4)/8=(2x + 3)/9

Solve the following percent problems

1. Find 15% of 85
2. What percent of 150 is 33.5
3. 2.5% of what number is 16.25

State the quadrant each ordered pair lies in

1. (-2,3)
2. (3,-1)
3. (-3,-4)

State the x and y intercept of the following linear equation

1. -4x + y = -4
2. X + y = 3

Find the slope of :

1. (1,4) and (2.7)
2. (-2,4) and (5,-10)

Write the equation of a line given the following information

1. Slope= -3 and has a point (-1,6)
2. Passes through (0,-4) and (1,2)
3. Is perpendicular to the line 2x – y =3 and has the point (1,4)
4. Passes through the point (2,-3) and is parallel to the line 3x-y=2