

Calendar Project Questions

1) Simplify:
 $(2x-2)(3x^2+9x-3)$
 What is the number
 in front of x^2 ?

2) Simplify:
 $(5x^2+8y^2+5xy)-(6xy+2y^2)$
 What is the number
 in front of y^2 ?

3) Simplify: $\frac{(x^3y^6)^{5/3}}{x^{-7}y^{-2}}$
 Multiply the exponent
 of y by 2.

4) The amount of time,
 in hours, it takes to
 build a garage varies
 inversely with how
 much each worker is
 paid. If a worker takes
 3 hours to build a
 garage at a wage of
 \$9.31 per hour, how much
 would the workers need
 to be paid to get the
 garage built in 2 hours?
 (round to the nearest
 whole number)

5) Solve by factoring:
 $f(x) = 3x^2 + 7x - 6$
 Multiply the denominator
 of the fractional
 answer by 9.

6) A school's drama
 department is putting
 on a production.
 Instead of using the
 school's indoor stage
 they decided to move
 the production outside
 to accommodate a
 greater audience. The
 length of the outdoor
 stage is 6 feet less than
 the width. If the total
 area of the outdoor
 stage is 720 ft^2 , what
 is the width?

7) Ryan used the quadratic
 formula to solve an
 equation and the result
 was: $\frac{8 \pm \sqrt{(-8)^2 - 4(1)(-2)}}{2(1)}$

What are the x -intercepts
 of Ryan's quadratic? Use
 the positive solution and
 round to the nearest
 whole number.

8) Solve for x :
 $2 + \sqrt{3x+7} = 6$

9) Find the value of x :

