Name: _____

Multiplying Monomials and Polynomials

Find the quotient.

1) $\frac{24p^2 + 16p}{-4p}$

2) $\frac{-10z^2 - 25z}{5z}$

3) $\frac{-6h^4 + h^3 + 10h^2}{2h^2}$

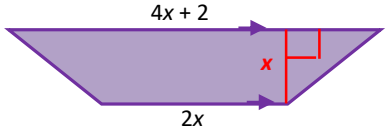
4) $\frac{11m^8 - m^6 - 2m^4}{m^2}$

5) $\frac{2t^6 + t^4 - 3t^3}{-t^2}$

6) $\frac{-3n^3 + n^2 - 2n}{-2n}$

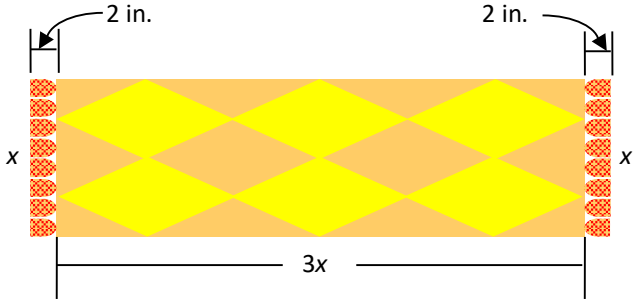
7) A rectangle has a length that is 3 units more than twice the width w. Sketch the rectangle. Write a polynomial expression in terms of w for the area of the rectangle. Give your answer in standard form.

8) Write a polynomial expression for the area of the figure. Give your answer in standard form.



9) Your friend says that the product of x^2 and $x^3 + 5x + 1$ is $x^6 + 5x^4 + x^2$. Do you agree with your friend? If not, explain your reasoning.

10) The length of a rug is three times the width. There are 2 inches of fringe on each end of the rug, as shown. Write a polynomial expression for the area of the rug, including the fringe. Give your answer in standard form.



Find the product.

11) $(9m + n - 4)2n$

12) $^-2x(x + xy + 3y)$

13) $a(3a + 4b - c)$

14) $(g + 11h + gh)(^-4g)$

15) $(5x + 6y + 8)xy$

16) $^-3n^2(m + n^2 + 2)$

17) $(5rs - 2r - s^2)(^-rs)$

18) $^-5c(^-c^2 + 7d^2 - d)$

19) $(2ab - a^2 + 4b)ab$