

Term

1) 5

2) x

3) $5x$

Types of Polynomials

Monomials - 1 term 5

binomials - 2 terms

$x^2 + 5$

trinomials - 3 terms

$x^2 + 3x + 5$

Coefficient

$3x$
 $5x^2$

Constant

1, 2, 3, 4

(have no variable)

1000

Degree

$x^2 + x + 5$

highest exponent



Things you already know!!

$$4 \times 5 = 20$$

$$(4)(5) = 20$$

Multiplying $4(5) = 20$
 Multiplying

Things you need to know :)

multiplying coefficients

Why didn't I use this example??

$$\downarrow \text{constant} \\ (4)(m) = 4m$$

↖ variable

$$6(z) = 6z$$

↖ constant



$4(6w)$
 \nearrow $24w$
 Constant

Multiplying

WHAT IF?

$4(6w^2 - 7p + 11)$
 \nearrow $24w^2 - 28p + 44$
 Constant

Multiply each term in the brackets by the term on the outside of the brackets.

$4(6w - 11)$
 \nearrow $24w - 44$
 Constant

Hint!(words)

Hint!

The Ultimate!



Things you already know!!

$$30 \div 3 = 10$$

$$\frac{30}{3} = 10$$

$$30/3$$

Things you need to know :)

$$60z \div 15 = 4z$$

constant

$$\frac{48m}{4} = 12m$$

constant.

dividing
by
#s



$\frac{100r^2}{5}$
 dividing \rightarrow
 $20r^2$

WHAT IF?

$(100r^2 + 50m - 65z) \div (-5)$
 $-20r^2 - 10m + 13z$

$\frac{100r^2 + 50m}{5}$
 dividing \rightarrow

$\frac{100r^2}{5} + \frac{50m}{5}$
 $20r^2 + 10m$

Separate the polynomial to make a sum of fractions.

Hint!
(Words)

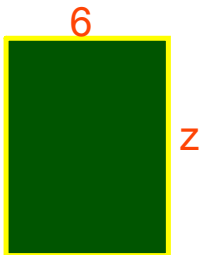
Hint!
(visual)

The Ulitmate :)

$A = \text{length} \times \text{width}$

$A = (l)(w)$

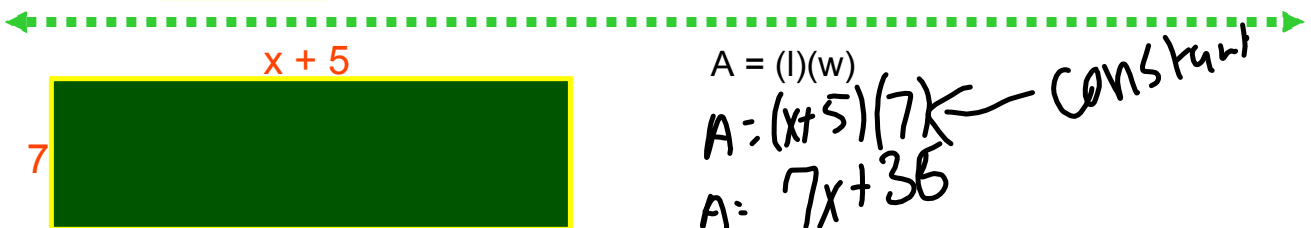
Write the multiplication statement
for the area of each rectangle.



$A = (l)(w)$

$$A = (6)(z)$$

$$A = 6z$$



$A = (l)(w)$

$$A = (x+5)(7) \leftarrow \text{constant}$$

$$A = 7x + 35$$

$$3(2x - 6y + 2z)$$

$$6x - 18y + 6z$$

multiplying each term by the constant.

$$-4(6z - 9)$$

$$-24z + 36$$

Try these:

$$36p + 45q - 81$$

$$\frac{36p}{9} + \frac{45q}{9} = \frac{81}{9}$$

$$4p + 5q - 9$$

$$(11y^2 - 8y + 10)(5)$$

$$55y^2 - 40y + 50$$

$$(30m - 15a + 9t - 54h) \div (-3)$$

$$-10m + 5a - 3t + 18h$$

$$\begin{array}{r} 30m \div -3 \\ -15a \div -3 \\ 9t \div -3 \\ -54h \div -3 \end{array}$$

$$(49t^2 - 7) \div (7)$$

$$7t^2 - 1$$

4/22

- ① Multiply + Divide Numbers
- ② Throw in your variable

Homework Tuesday Jan 6/15

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7 iii iv

8 iii iv

9 a+b

11 e)

13 f