Example 3.

The height of a ball kicked on Earth can be modelled by: $18 + 35t - 4.9t^2$
On Mars the height is modelled by: $52 + 26t - 1.3t^2$
Find a formula for the difference in the height of the ball on Mars as compared to Earth.

Mars - Earth

$(52 + 26t - 1.3t^2) - (18 + 35t - 4.9t^2)$

$52 + 26t - 1.3t^2 - 18 - 35t + 4.9t^2$

$4.9t^2 - 1.3t^2 + 26t - 35t - 18 + 52$

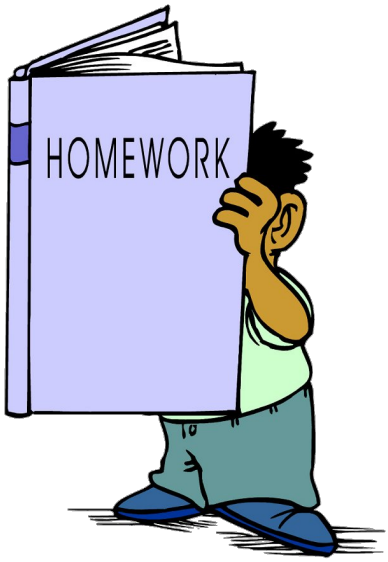
$3.6t^2 - 9t + 34$

Class/Homework

Page 234 - 236

(No algebra tiles just combine like terms and subtract)

#7
#8 aceh



pg 234

#7. a) $(3s^2+2s+4)-(2s^2+s+1)$

$(3s^2+2s+4)+(-2s^2-s-1)$

$3s^2+2s+4-2s^2-s-1$

$3s^2-2s^2+2s-s+4-1$

s^2+s+3

s^2+s+3

#8. a) $(3x+7)-(-2x-2)$

$(3x+7)+(+2x+2)$

$3x+7+2x+2$

$3x+2x+7+2$

$\boxed{5x+9}$

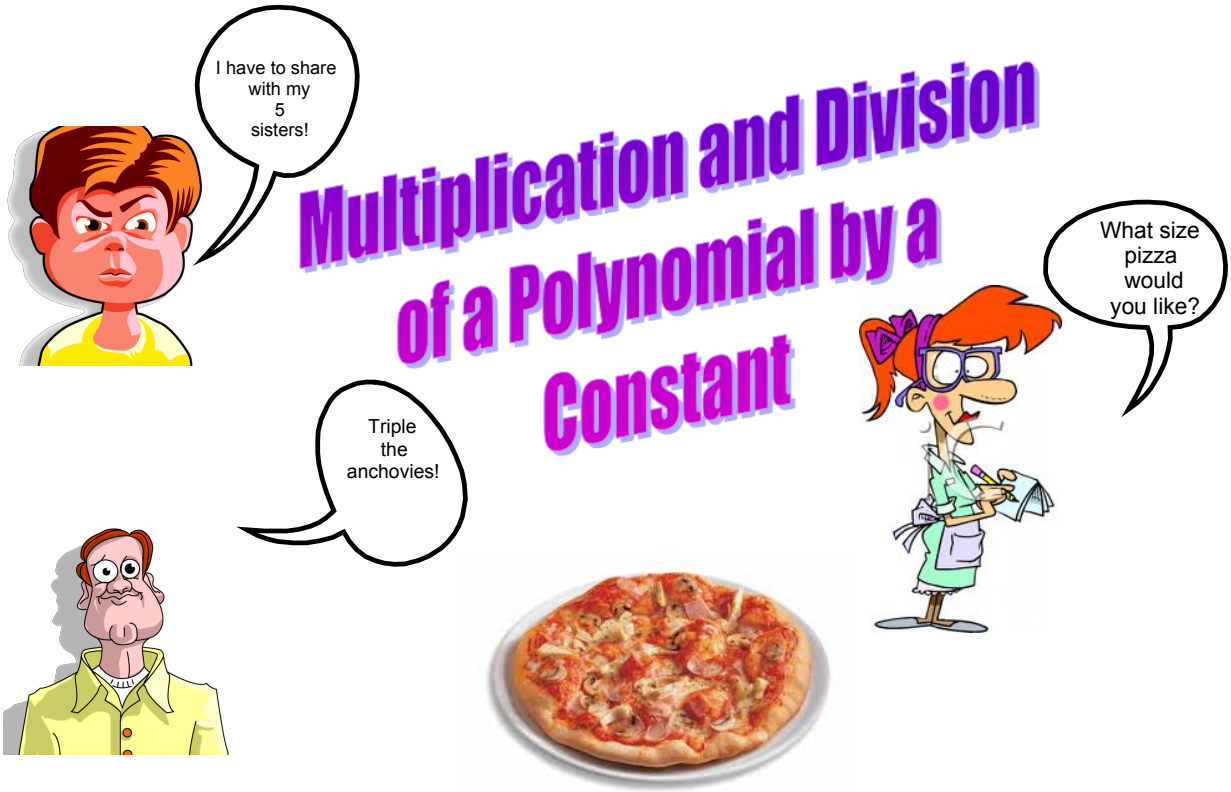
e) $(6x^2+7x+9)-(4x^2+3x+1)$

$(6x^2+7x+9)+(-4x^2-3x-1)$

$6x^2+7x+9-4x^2-3x-1$

$6x^2-4x^2+7x-3x+9-1$

$2x^2+4x+8$



Things you already know!!

4 x 5 =

(4)(5)=

4(5)=

Things you need to know :)

Why didn't I use this example??

(4)(m)= 4m

6(z)= 6z

(-2) (-r)= +2r

4(-3v)= -12v

#1) 4(6w) = 24w

#2) 4(6w - 11)

24w - 44

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

#3) $4(6w^2 - 7p + 11)$

Things you already know!!

$30 \div 3 =$ 10

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

Things you need to know :)

$60z \div 15 =$ 4z

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

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

Separate the polynomial to make a sum of fractions.

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

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

$$= 20r^2 + 10m$$

Now Divide each term

$$5(20r^2 + 10m)$$

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

Separate the polynomial to make a sum of fractions.

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

Now Divide each term

$3 \div 1 = 3$ terms

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

$\frac{100r^2}{-5} + \frac{50m}{-5} - \frac{65z}{-5}$

$-20r^2 - 10m + 13z$

Class/Homework

Page 234 - 236

(No algebra tiles just combine like terms and subtract)

Pg 234

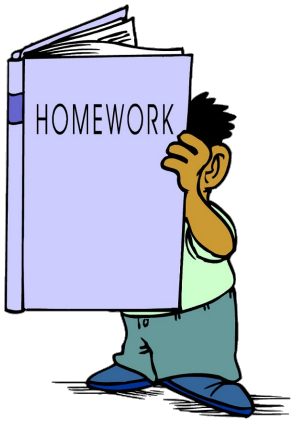
#8 b,d,f,g

#9 a, b

#12

#13 a, b

#17



Page 246 - 247

9

11acf

13ace

No Algebra Tiles