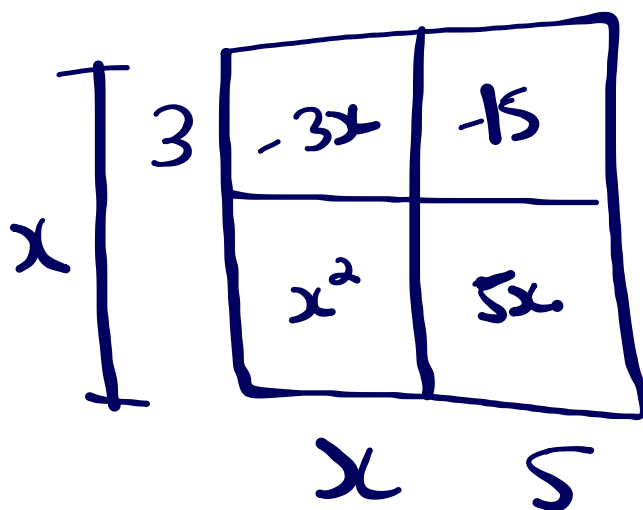


F.F.P.C Test

17DEC13

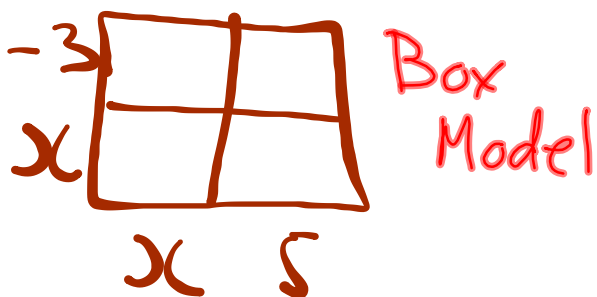
- 1.) Investigations 1-2.4
- 2.) 20 multiple choice questions
- 3.) Fixed perimeter, area models,
factored \iff Expanded

Area Model



Factored
 $(x-3)(x+5)$

Expanded
 $x^2 + 2x - 15$



What is the fixed perimeter?

24m

What is the equation for the area in terms of the length, l ?

$$A = l(12 - l)$$

What are the approximate dimensions if the area is 23.5 square meters?

2.5m \times 9.5m


What type of relationship is this?

quadratic

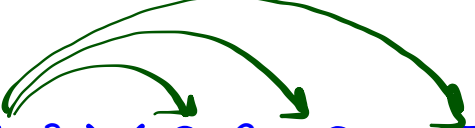
Rectangles With a Certain Fixed Perimeter

Length (m)	Area (m ²)
0	0
1	11
2	20
3	27
4	32
5	35
6	36
7	35
8	32
9	27
10	20
11	11
12	0

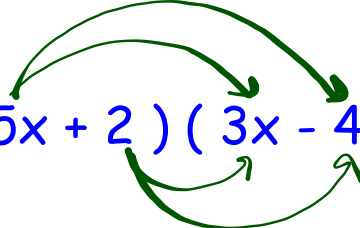
Write in expanded form

$$2w(3w - 10)$$


$$6w^2 - 20w$$

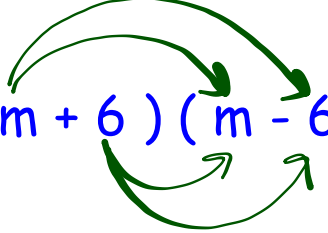
$$(4a^3)(2a^2 - 3a + 5)$$


$$8a^5 - 12a^4 + 20a^3$$

$$(5x + 2)(3x - 4)$$


$$15x^2 - 20x + 6x - 8$$

$$15x^2 - 14x - 8$$

$$(m + 6)(m - 6)$$


$$m^2 - 6m + 6m - 36$$

$$m^2 - 36$$

Write in factored form

$$2w^2 + 5w + 2$$

1st

$$a=2$$

$$b=5$$

$$c=2$$

and $ac=4$

$$\textcircled{1 \cdot 4}$$

$$2 \cdot 2$$

$$-1 \cdot -4$$

$$-2 \cdot -2$$

3rd

	w	2
$2w$	$2w^2$	$4w$
1	$1w$	2

4th $(2w+1)(w+2)$

Factor

$$16r^2 - 8r + 1$$

1st

$$a = 16$$

$$b = -8$$

$$c = 1$$

2nd

$$ac = 16$$

$$1 \cdot 16$$

$$2 \cdot 8$$

$$4 \cdot 4$$

$$-1 \cdot -16$$

$$-2 \cdot -8$$

$$\textcircled{-4 \cdot -4}$$

3rd

$4r$	-1
$4r$	$\begin{array}{c c} 16r^2 & -4r \\ \hline -4r & 1 \end{array}$
-1	

4th

$$(4r-1)(4r-1)$$

or

$$(4r-1)^2$$

Factor each trinomial, if possible. If the trinomial cannot be factored using integers, write *prime*.

1. $2x^2 - 3x - 2$

2. $3m^2 - 8m - 3$

3. $16r^2 - 8r + 1$

Equation: _____

A= _____

B= _____

C= _____

A*C=

Factors of A*C

(circle the one that adds to B)

GCF


A=

One circled factor

One circled factor

C=

ft Word



*"Hard work beats
talent when talent
fails to work hard."*

