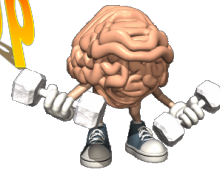


Look for

- 1) Is there a GCF?
- 2) Is it a simple trinomial?

Warm Up



Name: _____

Factor the following:

(Pass in for marks)

1) $n^2 + 7n - 30$ simple trinomial

largest diff

x	+
-30	+7

$(n-3)(n+10)$

-1	+30
-2	+15
-3	+10
-5	+6

2) $-80k^4 + 10k^2$

$-10k^2(8k^2 - 1)$

$10k^2(-8k+1)$ OR

3) $b^2 + 11b + 30$ simple

largest sign same

x	+
+30	+11

$(b+5)(b+6)$

+1	+30
+2	+15
+3	+10
+5	+6

4) $-5x^2 + 40x - 35$

$-5(x^2 - 8x + 7)$

simple trinomial

x	+
+7	-8

$-5(x-1)(x-7)$

Factor Each of the following:
(Finish For homework)

1. $x^2 - 14x + 45$	$(x-9)(x-5)$	2. $x^2 + 17x + 60$	$(x+5)(x+12)$
3. $x^2 - 18x + 80$	$(x-8)(x-10)$	4. $x^2 - 10x + 16$	$(x-8)(x-2)$
5. $x^2 - 6x + 9$	$(x-3)(x-3)$	6. $x^2 - 7x + 6$	$(x-6)(x-1)$
7. $x^2 + 20x + 99$	$(x+11)(x+9)$	8. $x^2 + 3x - 18$	$(x-3)(x+6)$
9. $x^2 - 3x - 88$	$(x+8)(x-11)$	10. $x^2 - 16x + 48$	$(x-12)(x-4)$
11. $x^2 + 11x + 30$	$(x+6)(x+5)$	12. $x^2 - 14x + 33$	$(x-11)(x-3)$
13. $x^2 + x - 30$	$(x+6)(x-5)$	14. $x^2 - 3x - 70$	$(x-10)(x+7)$
15. $x^2 + 8x - 9$	$(x+9)(x-1)$	16. $x^2 - 16x + 55$	$(x-5)(x-11)$
17. $x^2 + 6x - 72$	$(x-6)(x+12)$	18. $x^2 + 5x - 50$	$(x+10)(x-5)$
19. $x^2 + 10x + 24$	$(x+6)(x+4)$	20. $x^2 + 6x - 16$	$(x+8)(x-2)$

$$x^2 + x - 30$$

↑ largest
↑ sign diff

$$(x-5)(x+6)$$

x	$+$
-30	$+1$
$-1, +30$	
$-2, +15$	
$-3, +10$	
$-5, +6$	

$$x^2 + x - 30$$

$$x^2 - 10x + 16$$

When working with Factoring trinomials

-Always check for GCF first

$$n^3 - 4n^2 - 21n$$

n ($n^2 - 4n - 21$)

largest (pointing to n^2) *sign different* (pointing to -21)

has 1 as coefficient (pointing to n^2)

Simple trinomial (under $n^2 - 4n - 21$)

$\frac{x}{-21}$	$\frac{+}{-4}$
+ 1, 21	
+ 3, -7 ✓	

$$n (n+3) (n-7)$$

$$2n^2 - 14n + 24$$

largest factor sign same signs

$$2 (n^2 - 7n + 12)$$

3 terms, 1 in front of n^2

$$2 (n-3)(n-4)$$

x	+
+12	-7
- 1, 12	
- 2, 6	
- 3, 4	

$$3r^3 + 24r^2 + 45r$$

$$1) \quad x^2 + 12x - 28$$

$$2) \quad 7c^2 - 35c + 42$$

Homework

Short Quiz Monday

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Questions: 10(a,b), 13(a), 15ab, 21ce,
19(a,b)

*Rainbow
multis 15a)*

*$1a + 13k + k^2$
Reverse it
 $k^2 + 13k + 1a$*