February 24th

Due Today: HW 8.2
Due Tomorrow: HW 8.3

Unit 8: Factoring

Lesson 8.3: Two Step Factoring

Get Ready: Check your HW answers:

1) $10(2+5m-m^2)$
2) $(v+6)(v-2)$
3) $8v^3-8v^2-6v-7$
4) $(n-8)(n-9)$
5) $(3v-8)(v-9)$
6) $(5x+7)(5x-7)$
7) $6x^4(6x^2+7xy+1)$
8) Not factorable
9) $(5n+6)(n-2)$
10) $(3a^3+2b^3)(3a^3-2b^3)$
11) $2(k-4)(k+1)$
12) $4(3a+2)(3a-2)$

Sep 25-7:55 PM

MIXED FACTORING PROBLEMS

1. DOTS - binomial, square terms, SUBTRACTION
2. DIAMOND- quadratic, trinomial, a=1
3. ACGC - quadratic trinomial, a≠1
4. GCF - any #terms, any degree
5. ALWAYS CHECK FOR TWO STEP!

ax^2+bx+c

Feb 11-1:43 PM

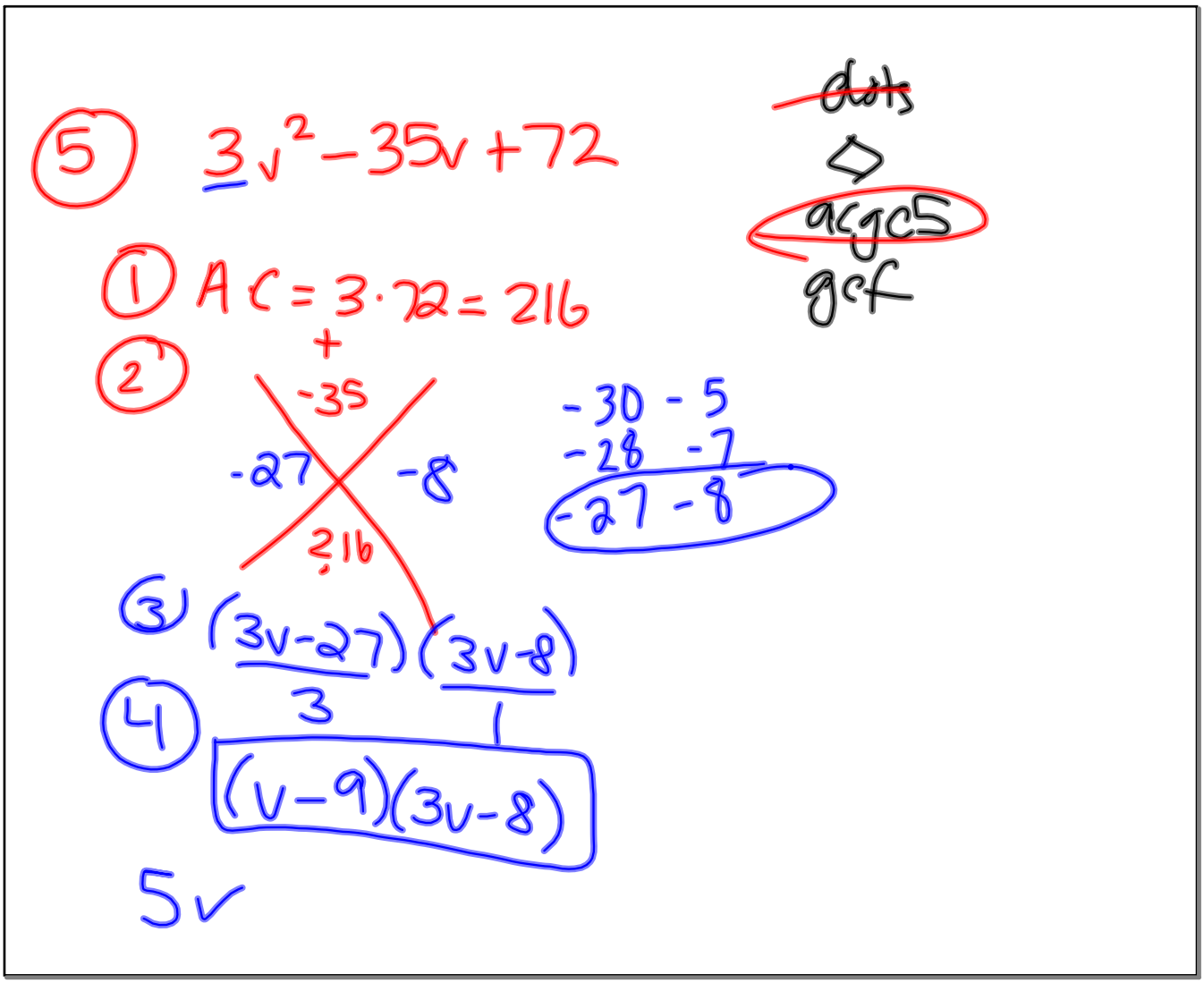
Homework Review

③ $8v^3 - 8v^2 - 6v - 7$

gcf = ____

Unfactorable

~~dots~~
~~◇~~
~~area~~
gcf
2 Step


5 $3v^2 - 35v + 72$
~~dots~~
◇
agcs
gcf
1 $AC = 3 \cdot 72 = 216$
2
+
-35
-27
-8
216
-30 -5
-28 -7
-27 -8
3 $(3v-27)(3v-8)$
3 1
4 $(v-9)(3v-8)$
5v

(9) $5n^2 - 4n - 12$

~~dots~~

acgc

gf

(1) $5 \cdot -12 = -60$

(2)

	+	
	-4	
-10		6
	-60	

(3) $\frac{(5n-10)}{5}\frac{(5n-6)}{1}$

(4) $(n-2)(5n-6)$

5✓

(11) $2k^2 - 6k - 8$

$2(k^2 - 3k - 4)$

Product: -4, sum: -3; factors: 1, -4

$\boxed{2(k+1)(k-4)}$

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

always factor gcf **first** if possible

AC method (crossed out):

1. $2 \cdot -8 = -16$; sum -6
2. -8, 2; product -16
3. $\frac{(2k-8)(2k+2)}{2 \quad\quad 2}$
4. $\boxed{(k-4)(k+1)}$

(12) $36a^2 - 16$

$4(9a^2 - 4)$

dots

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

dots

$(6a+4)(6a-4)$

$2(3a+2)2(3a-2)$

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

$$a^4 - 16$$

$\sqrt{a^4} = a^2$ $\sqrt{16} = 4$

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

dots

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

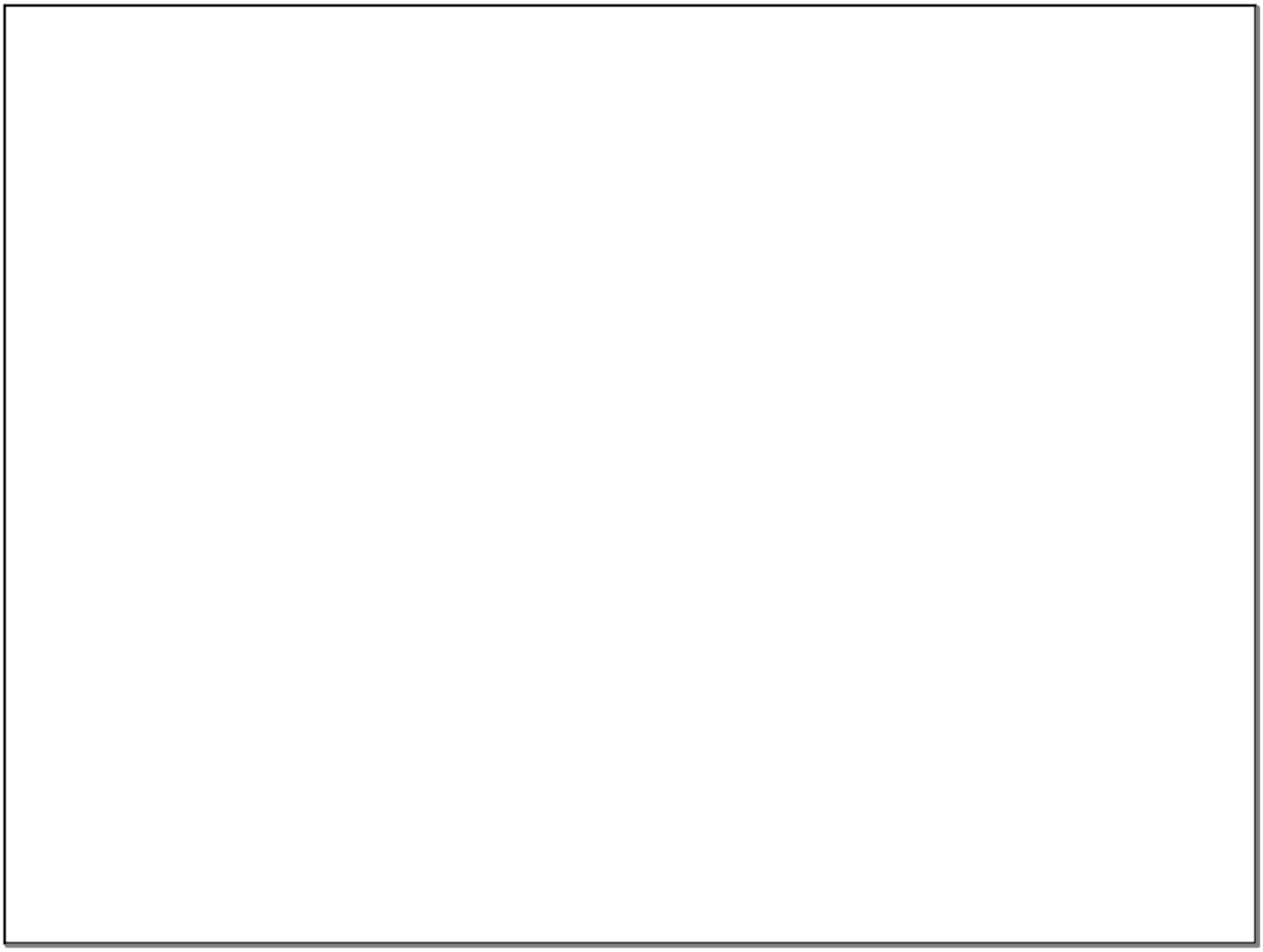
$(a^2+4)(a^2+4)$

$(a^2+4)^2$

TWO STEP FACTORING

Always check for GCF FIRST!

Feb 28-4:12 PM



Feb 24-11:01 AM

practice practice practice!

Type 1: GCF

Type 2: DIAMOND

Type 3: DOTS

Type 4: ACGC

Type 5: TWO STEP

Last Page: MIXED

Feb 28-4:13 PM

RECAP factoring Practice

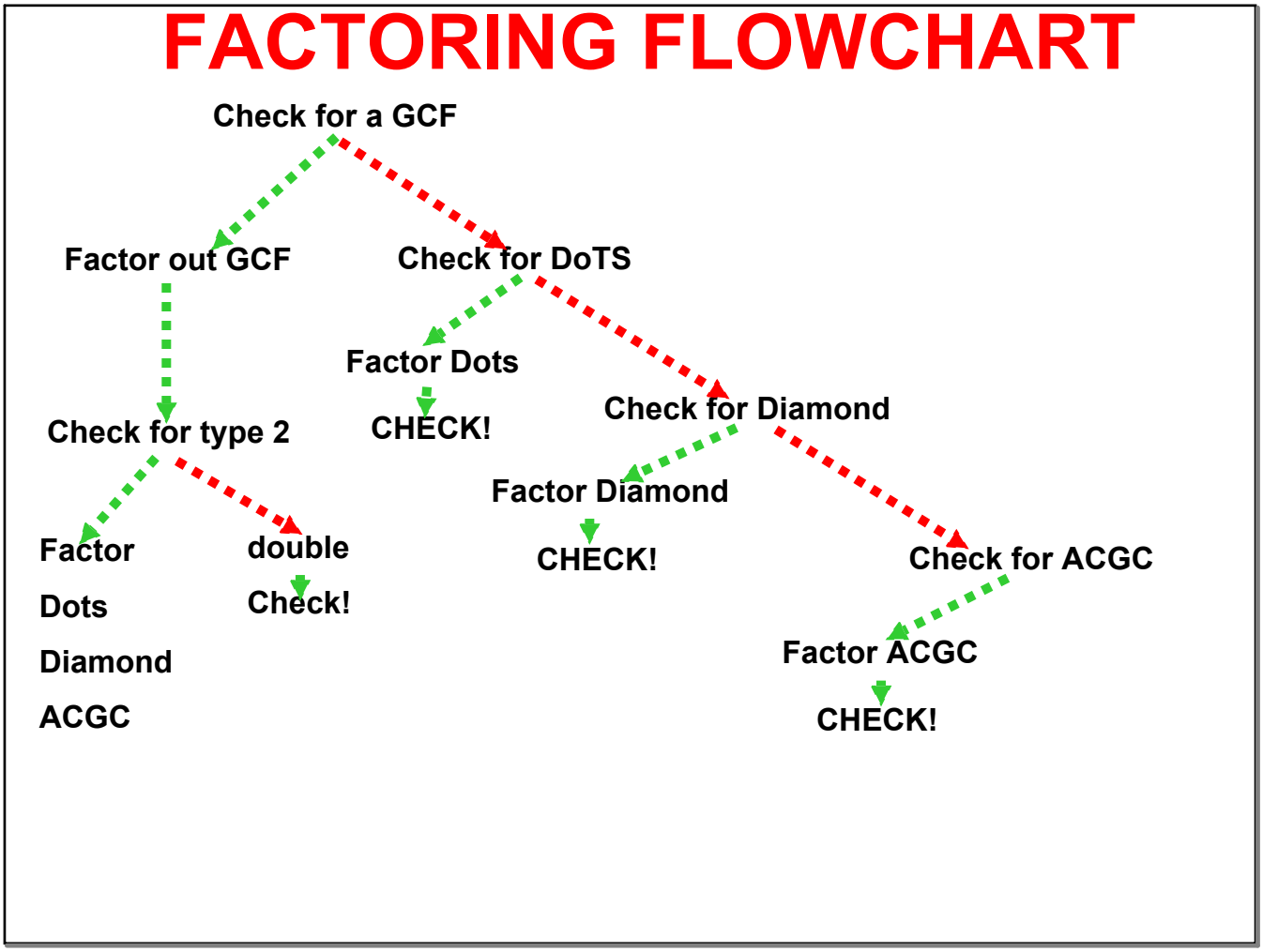
NEXT TIME:

Practice

HOMEWORK:

finish 8.3

Sep 25-8:52 PM


FACTORING FLOWCHART
Check for a GCF
Factor out GCF
Check for DoTS
Factor Dots
CHECK!
Check for type 2
Check for Diamond
Factor Diamond
CHECK!
Factor
Dots
Diamond
ACGC
double
Check!
Check for ACGC
Factor ACGC
CHECK!

Feb 25-2:02 PM