

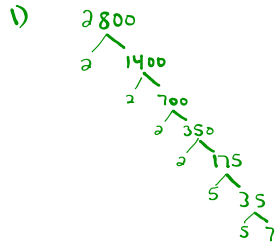
Homework Solutions to

TEST REVIEW WORKSHEET



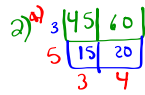
Chapter 3 WORKSHEET SOLUTIONS Test Review (Test Look-a-like).notebook April 19, 2018

Test Review WS (Test Look-a-like)
NRF 10



$$2800 = 2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 7$$

$$= 2^4 \times 5^2 \times 7$$

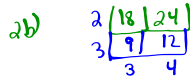


↓

$$\text{GCF}(45, 60) = 3 \times 5 = 15$$

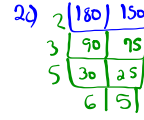
↓

$$\text{LCM}(45, 60) = 3 \times 5 \times 4 \times 3 = 180$$



$$\text{GCF}(18, 24) = 2 \times 3 = 6$$

$$\text{LCM}(18, 24) = 3 \times 2 \times 3 \times 4 = 72$$



$$\text{GCF}(180, 150) = 2 \times 3 \times 5 = 30$$

$$\text{LCM}(180, 150) = 2 \times 3 \times 5 \times 6 \times 5 = 900$$

3) $-48x^4y^3 + 24x^2y^3 - 36x^2y$

GCF

$$12x^2y^3(-4x^2y^0 + 2x^0y^3 - 3)$$

4) $16y^2 + 11y + 8 + 5y^2 - 2y + 7$

$$16y^2 + 5y^2 + 11y - 2y + 8 + 7$$

$$21y^2 + 9y + 15$$

GCF

$$= 3(7y^2 + 3y + 5)$$

Hard trinomial that doesn't factor

mult	}	add
+35		+3
1x35		
5x7		

5) $k^2 - 16k + 28$

Simple trinomial

$$(k-2)(k-14)$$

mult	}	add
+28		-16
-1x-28		
-2x-14		
-4x7		

6) $(x-2)(x+7) = (x^2 + 5x - 14)$

one factor
STEP 2

add to get middle +5

$$(+7) + (-2)$$

STEP 3 multiply factors to get last

$$(x-2)(x+7) = (x^2 + 5x - 14)$$

Other factor

7) $64x^2 - \square x + 25$

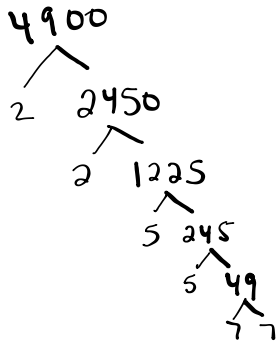
$(8x)^2$ $(5)^2$

↓

$$2ab = 2(8x)(5) = 80x$$

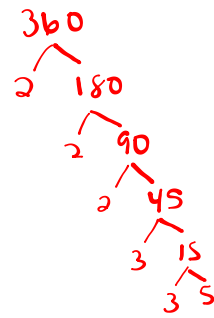
WS Solutions continued

8) a)



$$4900 = 2^2 \times 5^2 \times 7^2$$

b)



$$360 = 2^3 \times 3^2 \times 5$$

9)

$$15x^5b^7 - 10x^3b^5 + 12x^3 - 7x^5b^7 + 30x^3b^5 + 8x^3$$

Collect like terms (add coefficients)

$$15x^5b^7 - 7x^5b^7 - 10x^3b^5 + 30x^3b^5 + 12x^3 + 8x^3$$

$$8x^5b^7 + 20x^3b^5 + 20x^3$$

Factor out GCF

$$4x^3 (2x^2b^7 + 5b^5 + 5)$$

10)

$$(3x+9)(4x-8)$$

$$12x^2 - 24x + 36x - 72$$

$$12x^2 + 12x - 72$$

10b)

$$(3x+4)(2x-7) + (-2x+4)(5x-3)$$

$$= 6x^2 - 21x + 8x - 28 + -10x^2 + 8x + 20x - 12$$

$$= (6x^2 - 13x - 28) + (-10x^2 + 28x - 12)$$

$$= -4x^2 + 15x - 30$$

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Solutions to WS (test-look-a-like)

11a) $18x^5y^3 + 24x^7y^2 - 21x^3y^8 - 9x^2y^4$
 GCF
 $3x^2y^2 (6x^3y + 8x^5 - 7x^3y^6 - 3y^2)$

11b) $9m^2 - 16$ diff. of Squares
 $(3m-4)(3m+4)$

11c) $n^2 - 7n - 18$ simple trinomial
 $(n-9)(n+2)$

11d) $x^2 - 6x + 7$ Simple trinomial
 Does not factor

mult	add
+7	-6
-1x7	
add	-8

11e) $k^2 + 14k - 32$
 $(k+16)(k-2)$

11f) $3x^2 - 8x + 4$ (Hard trinomial)

mult	add
+12	-8
-1x12	
-2x6	
-8x4	

 $3x^2 - 6x - 2x + 4$
 $-3x(x-2) - 2(x-2)$
 $= (x-2)(3x-2)$

11g) $5x^2 - 17x - 12$ Hard trinomial
 Does Not factor

mult	add
-60	+17
+1x-60	
+2x-30	
+4x-15	
+5x-12	
+6x-10	

11h) $x^2 - 14x + 49$ Simple or perfect square trinomial
 $(x-7)^2$
 No factor

11i) $2x^2 - 22x + 60$
 GCF
 $= 2(x^2 - 11x + 30)$
 Simple trinomial

mult	add
+30	-11
-1x30	
-2x15	
-3x10	
-5x6	

 $= 2(x-5)(x-6)$

11j) $25b^2 - 60b + 36$
 perfect sq trinomial
 $(5b-6)^2$

11k) $12v^2 - 27$
 $= 3(4v^2 - 9)$
 difference of sq.
 $= 3(2v-3)(2v+3)$

11l) $15x^2y^2 - 60xy$
 GCF
 $15xy(xy-4)$

Attachments

Factoring TEST Review Worksheet (A Mix of Simple Hard & Special).pdf

Day 12.5_ Perfect Squares Test Review _HW Solutions to Day 12.notebook

Chapter 3 Test_2017_TEST REVIEW.doc