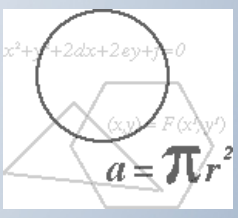


Warm up

The measure of $\angle B$, the complement of $\angle A$, is one-sixth the measure of $\angle C$, the suppliment of $\angle A$. Find the measure of each angle.

The measure of $\angle B$, the complement of $\angle A$, is one-sixth

$90 - m\angle A = \frac{1}{6}$

the measure of $\angle C$, the supplement of $\angle A$. Find the

$180 - m\angle A$

measure of each angle.

$x = m\angle A = 72°$

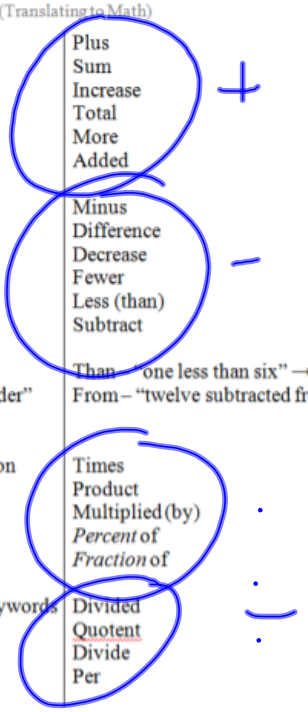
$90 - x = \frac{1}{6}(180 - x)$

$6 \cdot 90 - 6 \cdot x = \frac{1}{6}(180 - x) \cdot 6$

$540 - 6x = 180 - x$

<name>
Class: Algebra 2
Date: <date>
Topic: Lesson (Translating to Math)

Addition Keywords	Plus Sum Increase Total More Added
Subtraction Keywords	Minus Difference Decrease Fewer Less (than) Subtract
Subtraction "Reverse Order" Keywords	Than – "one less than six" → 6 - 1 From – "twelve subtracted from twenty" → 20 - 12
Multiplication Keywords	Times Product Multiplied (by) *Percent* of *Fraction* of
Division Keywords	Divided Quotent Divide Per



Keywords	Difference Decrease Fewer Less (than) Subtract
Subtraction "Reverse Order" Keywords	Than – "one less than six" → 6 - 1 From – "twelve subtracted from twenty" → 20 - 12
Multiplication Keywords	Times Product Multiplied (by) *Percent* of *Fraction* of
Division Keywords	Divided Quotent Divide Per
Division "Reverse Order" Keyword	Into – "three divided into nine" → 9 ÷ 3
Grouping Keywords	A comma Keyword portions containing another keyword
How to translate	1) Identify keyword (circle) 2) Identify parts it works on (underline) 3) Check if either part has another keyword in it (need parens)

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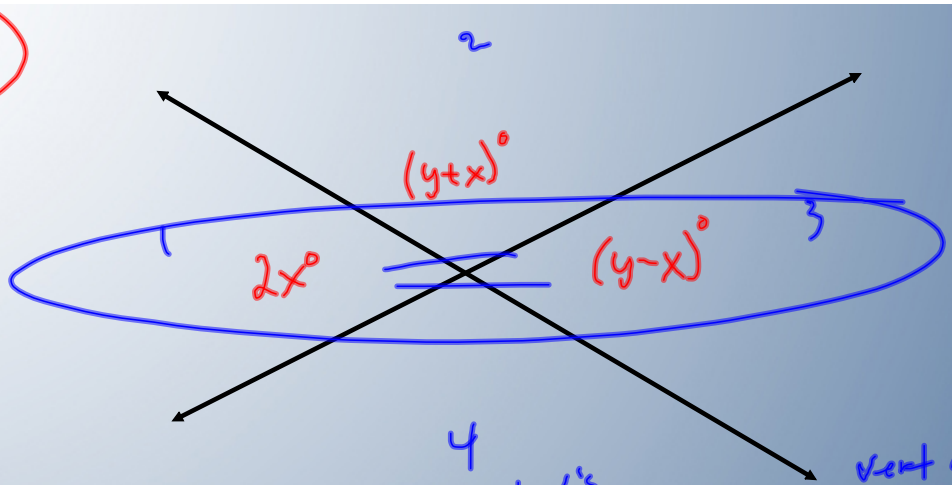


Suppl ∠'s ∠1,3

Vert ∠'s

m∠1 = 60

m∠2 = 120

m∠3 = 60

4

Suppl ∠'s

m∠2 + m∠3 = 180

(y+x) + (y-x) = 180

y+x+y-x = 180

2y = 180

y = 90

Vert ∠'s

m∠1 = m∠3

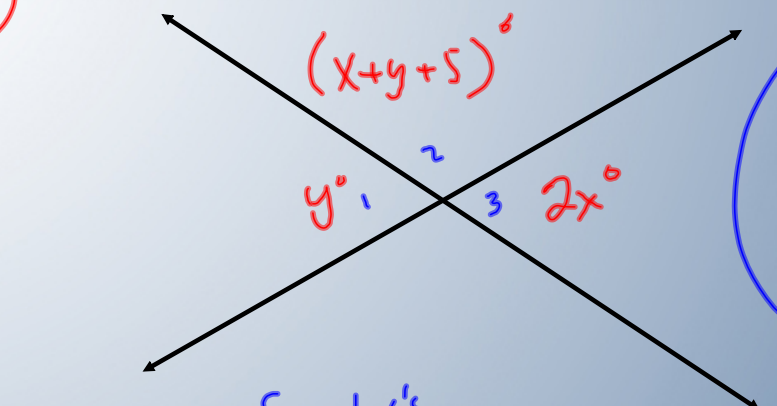
2x = y - x

2x = 90 - x

3x = 90

x = 30

58



Substitution Method of Elimination

Vert ∠'s

y = 2x

Suppl ∠'s

y + (x+y+5) = 180 or

x + 2y + 5 = 180

x + 2(2x) = 175

5x = 175

x = 35

y = 2·35

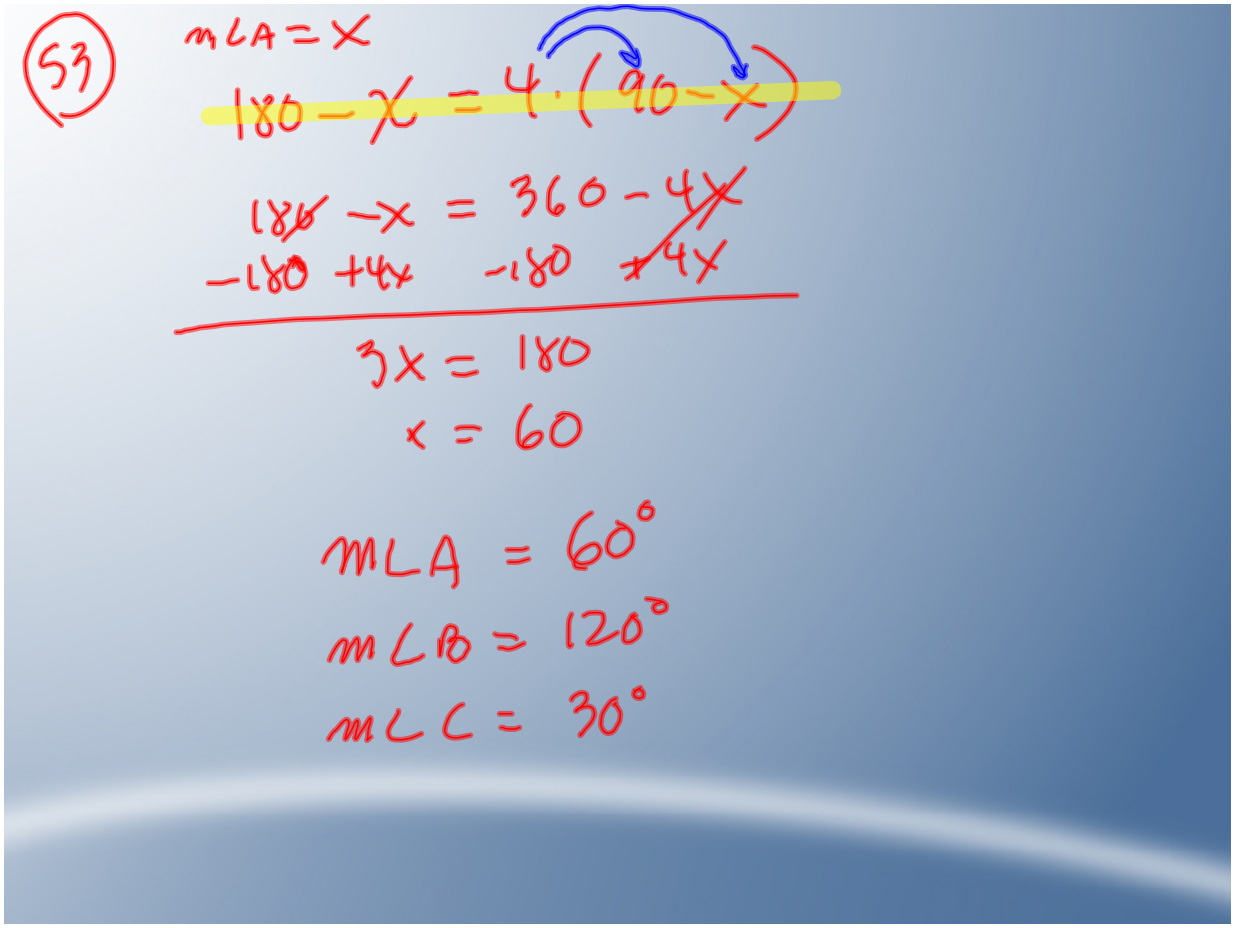
= 70

2x + (x+y+5) = 180

3x + y = 175

3x + 2x = 175

5x = 175



L2.R HW Problems

Pg 108 #1-27

Ch 2 Quiz Answers

1. H: $x+4=10$
   C: $x=6$
2. H: If you want to get good grades in school
   C: You must study hard
3. Sample May, or any other month not June
4. Sample Corn, or other veg.
5. No, must be in same plane
   counter-example: skew
6. Yes
7. NP
8. X, Y, Z are coplanar
9. If you run a good race then your coach is happy
10. If the car is old then it isn't efficient

1. $4x = 13$
2. $\angle TQM \cong \angle LTS$
3. Sym POE
4. Subst POE
5. Div POE
6. Add POE
7. $\angle 1 \cong \angle 3$
   $\angle 2 \cong \angle 4$
   Vert $\angle$ Thm
8. $\angle 2 \cong \angle 3$
   $\angle 1 \cong \angle 4$
   Suppl $\angle$'s & Trans POE
9. $\angle 1 \cong \angle 4$
   $\angle 2 \cong \angle 3$
   Subt POE
10. $\angle 1 \cong \angle 2$
    $\angle 3 \cong \angle 4$
    Vert $\angle$'s Thm