## Unit 3 Day 15

## Midterm Review

## Warm Up: Midterm Review

1. Solve for $x$ 2. Solve $5 x^{2}+6 x=7$. Give an
 exact answer.
2. H is in the interior of $\angle I G F$. You are given that $\mathrm{m} \angle \mathrm{IGH}=(2 x+5)$, $\mathrm{m} \angle \mathrm{FGH}=47, \mathrm{~m} \angle \mathrm{IGF}=(18 \mathrm{x}-12)$.

Find $m \angle I G H$ and $m \angle F G I$.
*ADD two more. These are not in printed notes!! 4. Solve $10^{x-3}=100,000$
5. What additional information is required to prove $\triangle C A B \cong \triangle L J K$ using the AAS Congruence postulate?


## Warm Up: Midterm Review

1. Solve for $x$.

2. Solve $5 x^{2}+6 x=7$. Give $\frac{-3 \pm 2 \sqrt{11}}{5}$ an exact answer.
3. H is in the interior of $\angle I G F$. You are given that $\mathrm{m} \angle \mathrm{IGH}=(2 \mathrm{x}+5)$, $\mathrm{m} \angle \mathrm{FGH}=47, \mathrm{~m} \angle \mathrm{IGF}=(18 \mathrm{x}-12)$. Find $\mathrm{m} \angle \mathrm{IGH}$ and $\mathrm{m} \angle \mathrm{FGI} . \quad \mathrm{m} \angle \mathrm{IGH}=13$
$\mathrm{m} \angle \mathrm{FGI}=60$
*ADD two more. These are not in printed notes!!
4. Solve $10^{x-3}=100,000 \quad \mathrm{x}=2$
5. What additional information is
required to prove $\triangle C A B \cong \triangle L J K$ using AAS Congruence postulate?

$$
\angle B C A \cong \angle K L J
$$



## Homework Answers Pg 28

1. a) $A(2,6), B(2,12), C(-6,2)$
b) $A(-3,1), B(-6,1), C(-1,-3)$
c) $\mathrm{A}(-1,-3), \mathrm{B}(-1,-6), \mathrm{C}(3,-1)$
d) $A(-1,3), B(-1,6), C(3,1)$
e) $A(-3,-1), B(-6,-1), C(-1,3)$
2. $x=9, y=75^{\circ}, z=70^{\circ}$
3. $x=4, y=6$
4. $x=11 / 4$
5. Translation right 4 down 2
6. a) ASA $\triangle P N O \cong \triangle M N L$
b) ASA $\triangle S T R \cong \triangle V T R$
c) SAS $\triangle P N O \cong \triangle M N L$
d) SSS $\quad \triangle H K M \cong \triangle L M K$

## Homework Answers Pg 29

7. $(x+1)(3 x+5) \quad$ 8. $x=\frac{-7 \pm \sqrt{-71}}{2} \quad$ 9. $x=\frac{-7 \pm 5 \sqrt{13}}{6}$
8. $0 \rightarrow>$ if discriminant is negative
$1 \rightarrow$ if disciminant is zero
$2->$ if disciminant is positive
9. If the discriminant is negative it will have two imaginary solutions
10. Rational $->$ when the discriminant is a perfect square 13. height: 53.64 ft time until impact: 2.42 sec 14. $y=0.75 x^{2}-7.5 x+15.75$
11. a) $5 x \sqrt[5]{x^{2}}$
b) $4 x y^{3} z^{7} \sqrt[3]{x^{2} y}$
12. $x=21$
13. $(x-6) / 3=y$
14. $r=1.44 \%$

# Homework For Tonight: Complete Midterm Review Packet!! 

## STUDY FOR MIDTERM TOMORROW ©

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## Midterm Review Activity!

## On notebook paper....

## REVIEW Scavenger Hunt



