Name _____ Date _____ Class _____

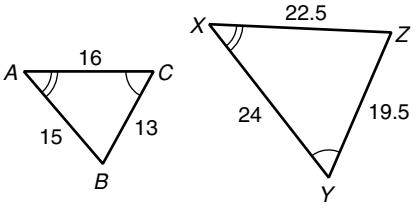
LESSON 7-2

Practice B

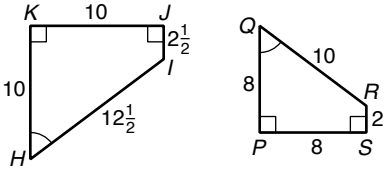
Ratios in Similar Polygons

Identify the pairs of congruent corresponding angles and the corresponding sides.

1.

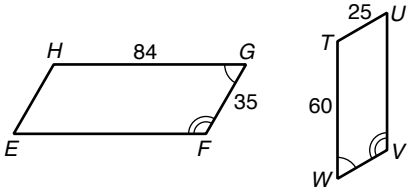


2.

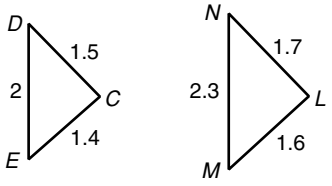


Determine whether the polygons are similar. If so, write the similarity ratio and a similarity statement. If not, explain why not.

3. parallelograms *EFGH* and *TUVW*

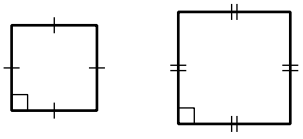


4. $\triangle CDE$ and $\triangle LMN$

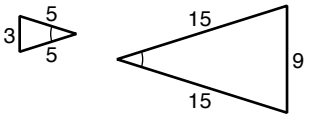


Tell whether the polygons must be similar based on the information given in the figures.

5.



6.



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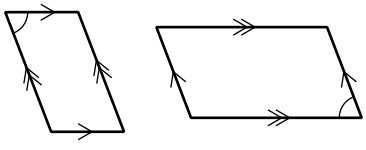
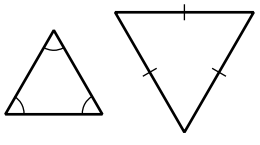


8.



LESSON **7-2**

Practice B
Ratios in Similar Polygons

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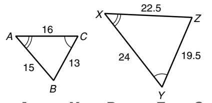
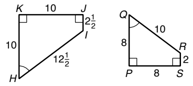
1. 

$\angle A \cong \angle X$; $\angle B \cong \angle Z$; $\angle C \cong \angle Y$;

$\frac{AC}{XY} = \frac{AB}{XZ} = \frac{BC}{ZY} = \frac{2}{3}$

2. 

$\angle H \cong \angle Q$; $\angle I \cong \angle R$; $\angle J \cong \angle S$;

$\angle K \cong \angle P$;

$\frac{KJ}{PS} = \frac{KH}{PQ} = \frac{HI}{QR} = \frac{JI}{SR} = \frac{5}{4}$

Determine whether the polygons are similar. If so, write the similarity ratio and a similarity statement. If not, explain why not.

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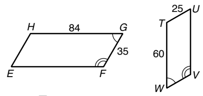
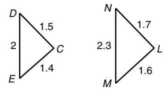


yes; $\frac{7}{5}$; Possible answer:

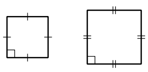
▱*EFGH* ∼ ▱*WTUV*

4. △*CDE* and △*LMN*

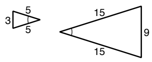


No; sides cannot be matched to have corresponding sides proportional.

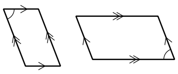
Tell whether the polygons must be similar based on the information given in the figures.

5. 

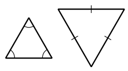
yes

6. 

yes

7. 

no

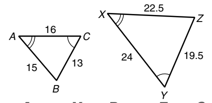
8. 

yes

LESSON **7-2**

Practice B
Ratios in Similar Polygons

Identify the pairs of congruent corresponding angles and the corresponding sides.

1. 

$\angle A \cong \angle X$; $\angle B \cong \angle Z$; $\angle C \cong \angle Y$;

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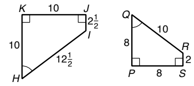
2. 

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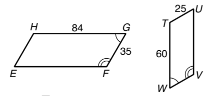

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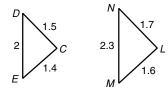
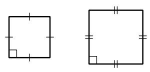
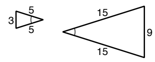


No; sides cannot be matched to have corresponding sides proportional.

Tell whether the polygons must be similar based on the information given in the figures.

5. 

yes

6. 

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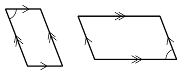
7. 

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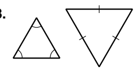
8. 

yes

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LESSON **7-2**

Practice B
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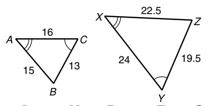
1. 

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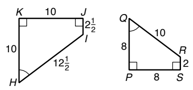
2. 

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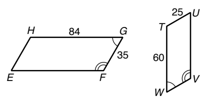

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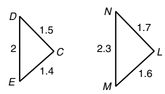

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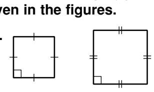
5. 

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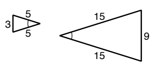
6. 

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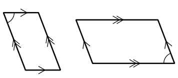
7. 

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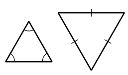
8. 

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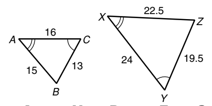
1. 

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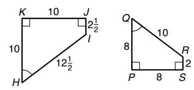
2. 

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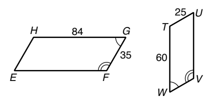

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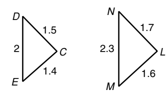

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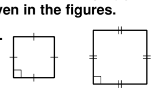
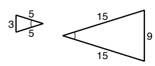
5. 

yes

6. 

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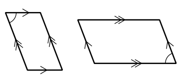
7. 

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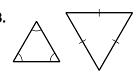
8. 

yes

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