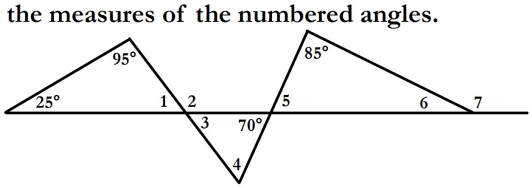
Bell Ringer #23:

Find the measures of the numbered angles.



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Homework Check:

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Skills Practice #1-12

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Practice #1-7, 10

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Unit 4: Congruent Triangles

LT14: 4-1 Classifying Triangles
LT15: 4-2 Triangle Angle-Sum
LT16: 4-6 Isosceles & Equilateral
LT17: 4-3 Congruent Triangles
LT18: 4-4, 4-5 Triangle Congruence
LT19: 4-4, 4-5 Triangle Proofs

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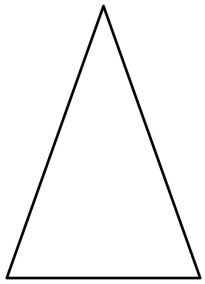
legs of an isosceles triangle - the two sides that are not the base

vertex angle - the angle formed by the two legs

base angles - the angles formed by the legs and base

Page 4



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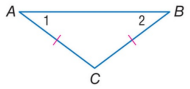
Theorems Isosceles Triangle

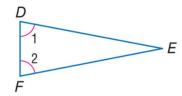
4.10 Isosceles Triangle Theorem
If two sides of a triangle are congruent, then the angles opposite those sides are congruent.

Example If $\overline{AC} \cong \overline{BC}$, then $\angle 2 \cong \angle 1$.



4.11 Converse of Isosceles Triangle Theorem
If two angles of a triangle are congruent, then the sides opposite those angles are congruent.

Example If $\angle 1 \cong \angle 2$, then $\overline{FE} \cong \overline{DE}$.



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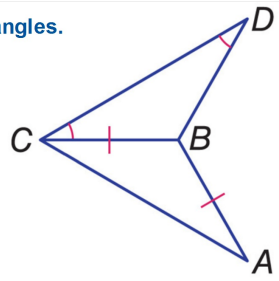
A. Name two unmarked congruent angles.



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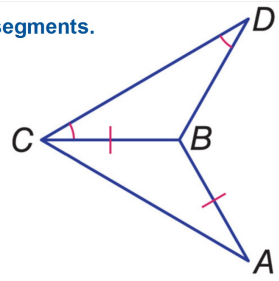
B. Name two unmarked congruent segments.



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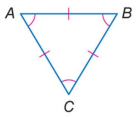
Corollaries Equilateral Triangle

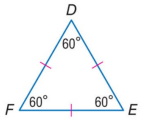
4.3 A triangle is equilateral if and only if it is equiangular.

Example If $\angle A \cong \angle B \cong \angle C$, then $\overline{AB} \cong \overline{BC} \cong \overline{CA}$.



4.4 Each angle of an equilateral triangle measures 60.

Example If $\overline{DE} \cong \overline{EF} \cong \overline{FE}$, then $m\angle A = m\angle B = m\angle C = 60$.



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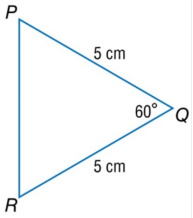
A. Find $m\angle R$.



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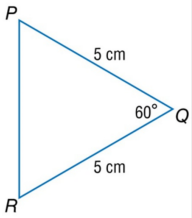
B. Find PR.



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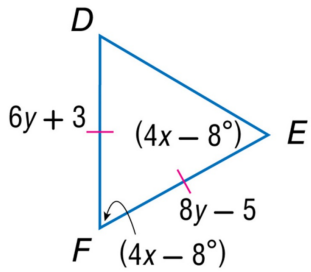
ALGEBRA Find the value of each variable.



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Homework:

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Skills Practice #1-8

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Practice #1-9