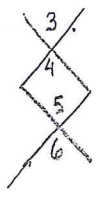


4. Review #2
Complete these proofs

Math

UNIT 6

Given: $\angle 4 \cong \angle 5$
Prove: $\angle 3 \cong \angle 6$



Statements	Reasons
1.	1. given
2. $\angle 3 \cong \angle 4$	2. _____
3. _____	3. transitive
4. _____	4. Vert. \angle 's \cong
5. $\angle 3 \cong \angle 6$	5. _____

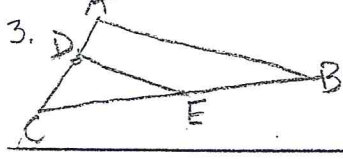
2. Factor the trinomials

- a) $x^2 + 3x - 28$
- b) $3x^2 + 7x + 2$

Solve the quadratic equations.

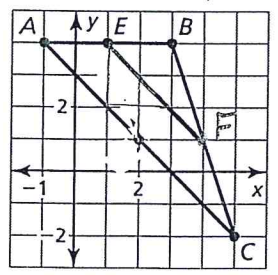
- c) $x^2 + x - 6 = 0$
- d) $x^2 + 5x - 8 = 0$

B. Use properties of midsegments to answer questions 3-9



DE is a midsegment, 4. If $DE = 8$, then $AB =$ _____
If $EB = 5$, then $CE =$ _____

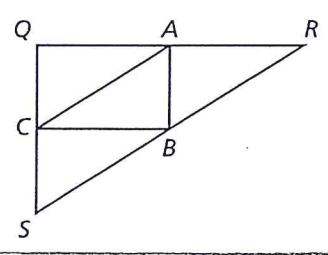
5. Show that \overline{EF} is parallel to \overline{AC} and that $EF = \frac{1}{2}AC$.



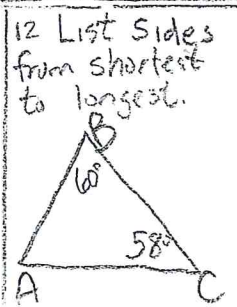
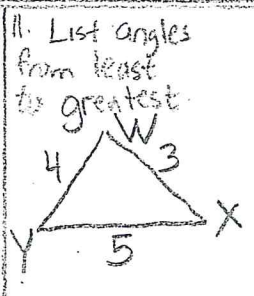
- A(-1, 4)
- B(3, 4)
- C(5, -2)
- E(1, 4)
- F(4, 1)

In # 6-9, use $\triangle QRS$ where A, B, and C are the midpoints of the sides.

- 6. When $AB = 16$, what is QS ?
- 7. When $SR = 68$, what is CA ?
- 8. When $SR = 46$, what is BR ?
- 9. When $CA = 3x - 1$ and $SR = 5x + 4$, what is CA ?



10. Find midpoint and length of \overline{QR}
Q(,)
R(,)



13. Find the possible lengths for the 3rd side. Use a compound inequality.

