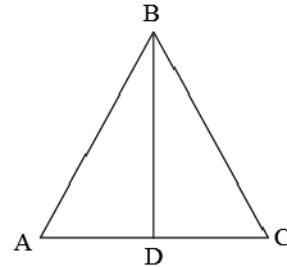1.

Given: $\overline{AB} \cong \overline{CB}$, D is the midpoint of $\overline{AC}$
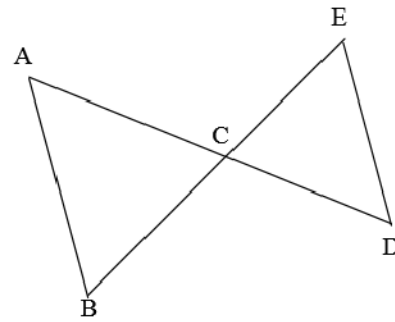
Prove: $\triangle ADB \cong \triangle CDB$

Statements	Reasons
1. $\overline{AB} \cong \overline{CB}$ D is the midpoint of $\overline{AC}$	1.
2.	2. Definition of a Midpoint
3.	3. Reflexive Property
4. $\triangle ADB \cong \triangle CDB$	4.

2. Given: $\overline{AB} \,/\!/\, \overline{DE}$, $\overline{BC} \cong \overline{EC}$
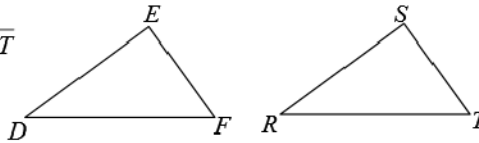
Prove: $\triangle ABC \cong \triangle DEC$

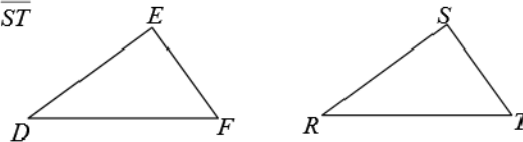| Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.

3. Write the slope-intercept form of the equation of the line passing through the point (4,-1) and parallel to y= -3/2 x -5.

On problems 4-6, state an abbreviation of a postulate or theorem (SSS, SAS, AAS, ASA, HL) that you could use to prove that $\triangle DEF \cong \triangle RST$. If none, write "none".
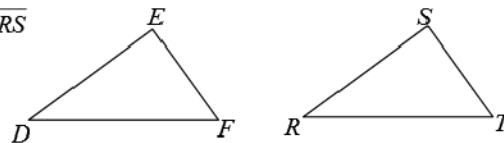
4. $\overline{DE} \cong \overline{RS}$, $\overline{EF} \cong \overline{ST}$, $\overline{DF} \cong \overline{RT}$
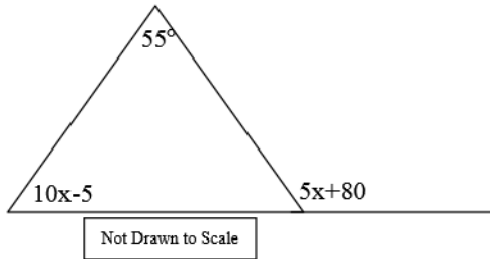

5. $\angle D \cong \angle R$, $\angle E \cong \angle S$, $\overline{DE} \cong \overline{ST}$

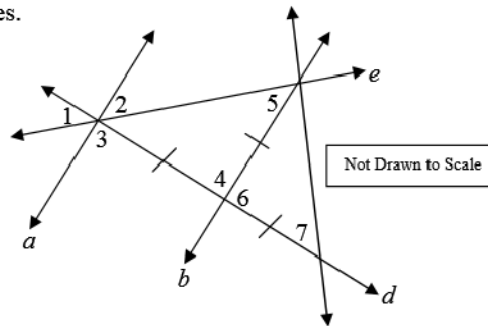6. $\angle F \cong \angle T$, $\overline{DF} \cong \overline{RT}$, $\overline{DE} \cong \overline{RS}$
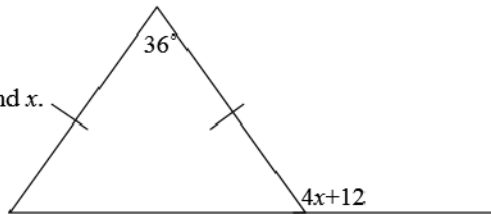
7. Find the value of x.

8. Given ΔDES, $\overline{DE} \cong \overline{ES}$ and $m < D = 48°$
   Find $m<E$.

9. Find all of the numbered angles.
   Given: $a//b$; $m\angle 5 = 63°$

10. Find x.

11. Solve $5x^2 + 13x = 6$

For 12-14, it may help to draw your own picture for each.

12. In ΔQRS, if $\overline{QS}$ is the hypotenuse, which angle is the right angle?

13. In ΔQRS, the side that lies opposite $<S$ is _____.

14. In ΔQRS, if $\overline{SR} \cong \overline{QR}$, then $<$_____$\cong<$_____ .

15. Change this equation to **STANDARD FORM**.
$$y = \frac{4}{3}x + \frac{7}{2}$$