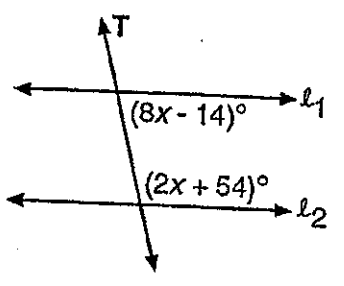


Parallel Lines

Geometry

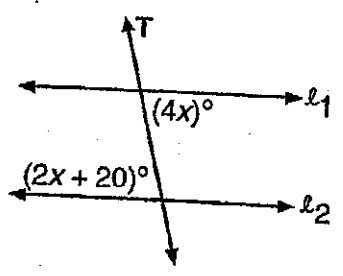
Part 1: Each question is worth 3 points.

1) What is the value of x that makes $l_1 \parallel l_2$?



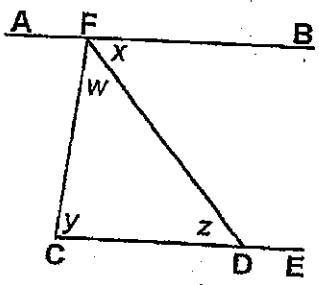
- A) 23.3
- B) 22
- C) 14
- D) 11.3

2) What is the value of x that makes $l_1 \parallel l_2$?



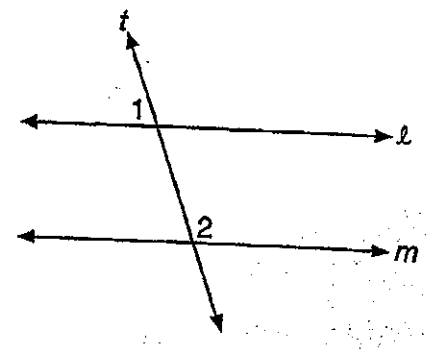
- A) 26.6
- B) 10
- C) 8
- D) 11.6

3) In the accompanying diagram, $\overline{AFB} \parallel \overline{CDE}$. If \overline{FD} bisects $\angle CFB$, which statement is true?



- A) $\angle X \cong \angle y$
- B) $\angle y \cong \angle z$
- C) $\angle W \cong \angle y$
- D) $\angle W \cong \angle z$

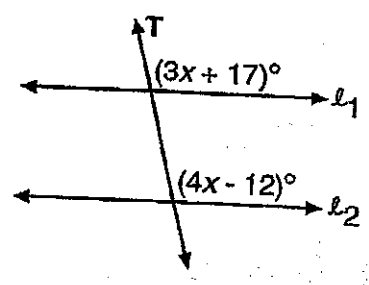
4) In the accompanying diagram, parallel lines l and m are cut by transversal t .



Which statement about angles 1 and 2 must be true?

- A) $\angle 1 \cong \angle 2$
- B) $\angle 1$ and $\angle 2$ are right angles
- C) $\angle 1$ is a complement to $\angle 2$
- D) $\angle 1$ is a supplement to $\angle 2$

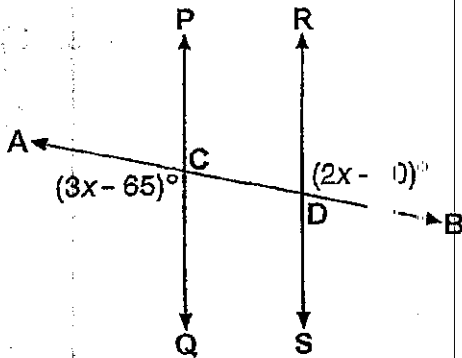
5) What is the value of x that makes $l_1 \parallel l_2$?



- A) 26.4
- B) 5
- C) 25
- D) 29

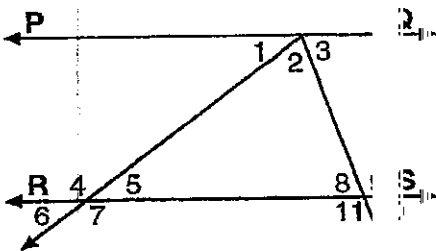
Part 2: Each question is worth 4 points. Show all work for partial credit.

- 6) In the accompanying diagram, \overline{AB} intersects \overline{PQ} and \overline{RS} at C and D , respectively.



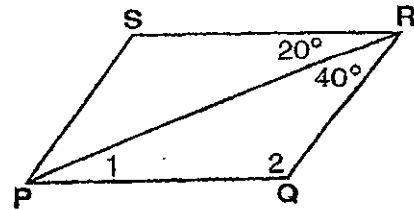
If $\overline{PQ} \parallel \overline{RS}$, $m\angle RDB = (2x - 10)^\circ$, and $m\angle QCA = (3x - 65)^\circ$, find x .

7)



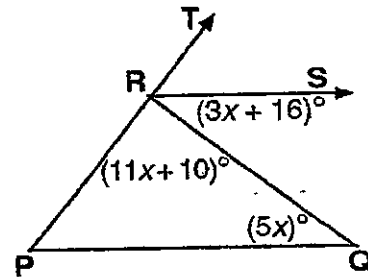
If $\overline{PQ} \parallel \overline{RS}$, $m\angle 5 = 30^\circ$, and $m\angle 8 = 110^\circ$, find the measure of the remaining angles in the given figure.

- 8) If $\overline{PQ} \parallel \overline{SR}$ and $\overline{PS} \parallel \overline{QR}$, find $m\angle 1$ and $m\angle 2$.



Questions 9 and 10 refer to the following:

In the figure below, $\overline{RS} \parallel \overline{PQ}$.

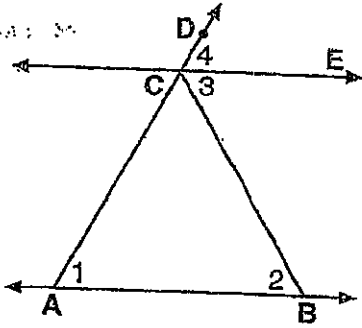


- 9) Find the value of x .

- 10) Find the $m\angle PRQ$.

Part 3: Show all work for each question.

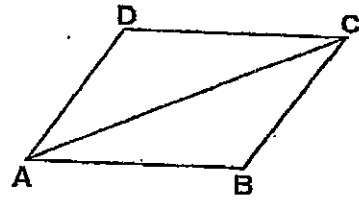
11)



Given: $\angle 1 \cong \angle 3$
 \overline{CE} bisects $\angle DCB$

Prove: $\overline{CE} \parallel \overline{AB}$

12)



Given: $\overline{AB} \parallel \overline{DC}$
 $\overline{AB} \cong \overline{DC}$

Prove: $\overline{AD} \cong \overline{CB}$

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