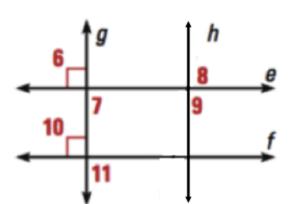
5.2b Constructions of Perpendicular Lines

LEVEL: EMERGING

Directions: Use the following diagram to determine whether enough information is given to conclude that the statement is true in questions 1 through 6. Explain your answers.



1) $g \parallel h$

2) $\angle 7 \cong \angle 10$

3) ∠6 ≅ ∠8

4) ∠7 ≅ ∠11

5) ∠7 ≅ ∠9

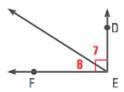
6) ∠6 ≅ ∠11

LEVEL: PROFICIENT

Directions: Fill in the following two-column proof.

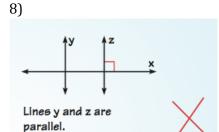
7) Given: $\overrightarrow{ED} \perp \overrightarrow{EF}$

Prove: $\angle 7$ and $\angle 8$ are complementary.



Statements	Reasons
(1)	(1)
(2)	(2)
(3)	(3)
(4)	(4)
(5)	(5)
(6)	(6)

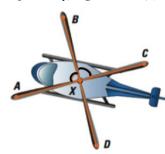
Error Analysis: Explain why the statement about the figure is incorrect.



The distance from \overrightarrow{AB} to point C is 12 cm.

LEVEL: MASTERY

9) In the helicopter at the right, are $\angle AXB$ and $\angle CXB$ right angles? Explain.



Directions: Construct a perpendicular line from a point or 10)	the line.
Directions: Construct a perpendicular line to the original	l line that passes through the given point.
12)	13)
•	•
	!

4)		15)	
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