

Math 206 - Quiz 9

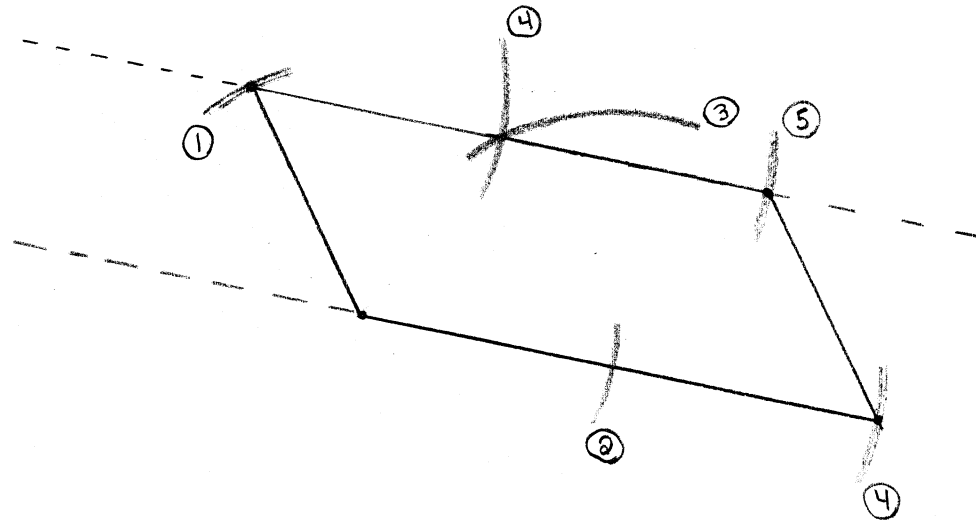
November 22, 2010

Name key

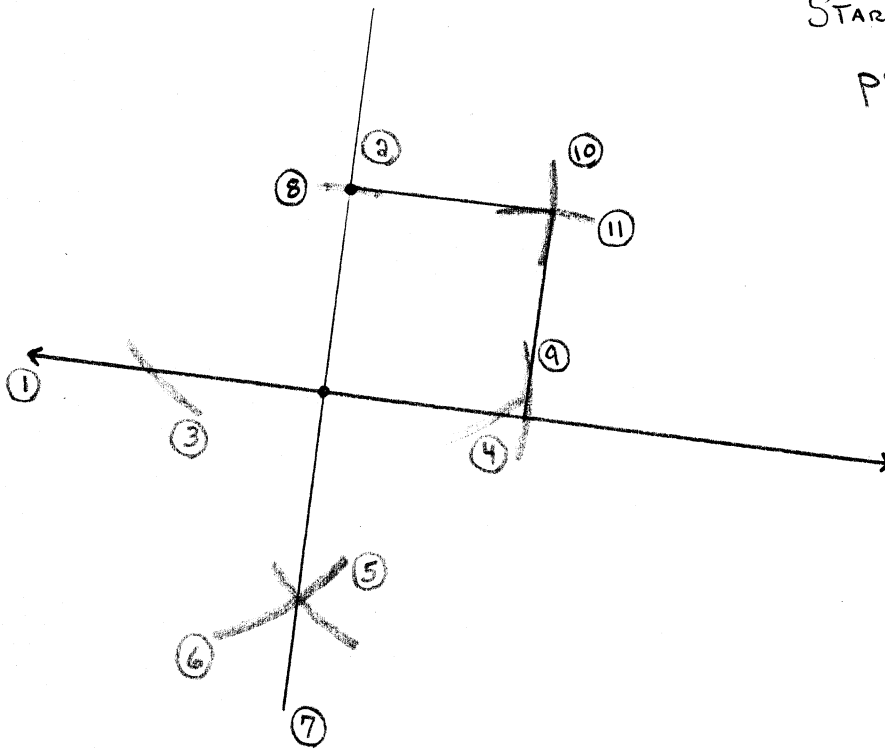
Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (1 point) Sketch two line segments that share a common endpoint and make an obtuse angle. Then use only a compass and straightedge to construct a parallelogram with your segments forming two adjacent sides.



2. (1 point) Using only a compass and straightedge, construct a square.



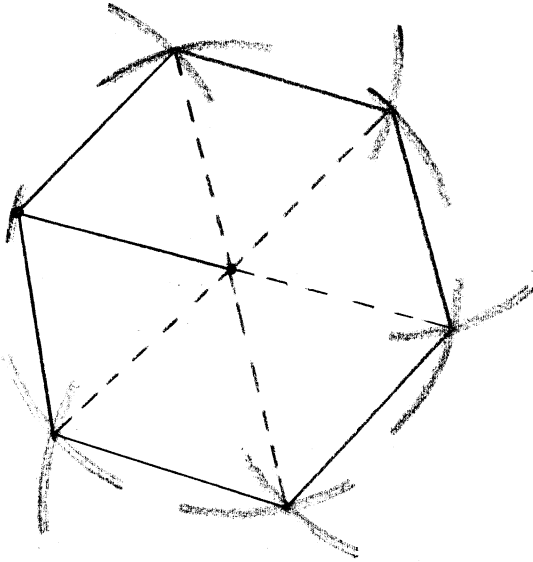
START BY CONSTRUCTING
PERP LINES.

THEN CONSTRUCT
A RHOMBUS.

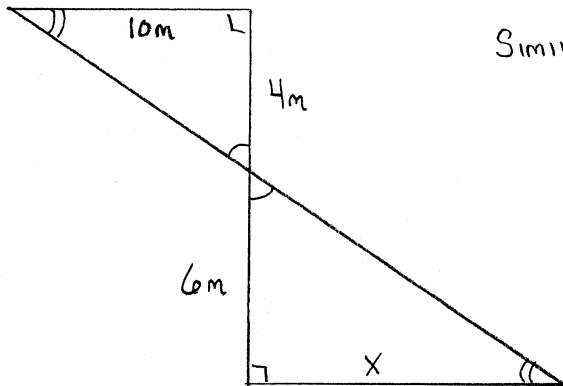
A RHOMBUS WITH
A RIGHT
ANGLE IS
A SQUARE.

3. (1 point) Using only a compass and straightedge, construct a regular hexagon.

CONSTRUCT
BY MAKING 6
EQUILATERAL Δ'S.



4. (1 point) Section 12-4A, Problem #18

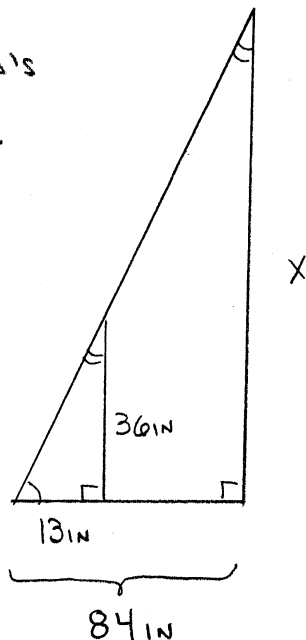


SIMILAR Δ'S BY AAA.

$$\frac{6}{4} = \frac{x}{10} \Rightarrow x = \frac{60}{4} = \boxed{15m}$$

5. (1 point) Section 12-4A, Problem #19

SIMILAR Δ'S
BY AAA.



$$\frac{84}{13} = \frac{x}{36}$$

$$x = \frac{36 \cdot 84}{13}$$

$$x = 232.615 \text{ IN}$$

OR

$$x \approx \boxed{19.4 \text{ FT}}$$