## Secondary Math II

7.3 Similar Polygons

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PERIOD: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Solve each proportion for the given variable.*

1. 2. 3.

4. 5. 6.

*Is each given similarity statement true or false? Take measurements to decide if needed. EXPLAIN your answer.*

7.

B

A

C

D

G

F

H

E

G

F

H

E

B

A

C

D

8.

*State whether each of the following illustrates two similar figures. How do you know?*

9. 10.

4

8

6

B

C

A

F

EE

D

4

3

2

50◦

130◦

50◦

130◦

1

1

3

3

6

6

2

2

140◦

40◦

140◦

40◦

Assume that

* (not to scale)*11. 12.

13. 14.

15. ∠\_\_\_\_\_\_\_\_\_\_\_\_ 16. ∠ \_\_\_\_\_\_\_\_\_\_\_ 17. ∠ \_\_\_\_\_\_\_\_\_\_

18. ∠\_\_\_\_\_\_\_\_\_\_\_\_\_ 19. ∠ \_\_\_\_\_\_\_\_\_\_ 20. ∠\_\_\_\_\_\_\_\_\_\_\_\_\_