

NAME: _____

1. Determine if the statement is a good definition. If it is not, state a counterexample.
A prime number is a whole number whose only factors are 1 and itself.

2. Determine if the statement is a good definition. If it is not, state a counterexample.
A triangle is a figure with three segments, each of which intersect the others exactly once.

3. Determine if the statement is a good definition. If it is not, state a counterexample.
A flower is a small living thing with bright colors.

4. Determine if the statement is a good definition. If it is not, state a counterexample.
A circle is a figure that is round.

5. Determine if the statement is a good definition. If it is not, state a counterexample.
A square is a figure with four right angles.

6. Determine if the statement is a good definition. If it is not, state a counterexample.
A hot air balloon is a device that floats in the air.

7. Determine if the statement is a good definition. If it is not, state a counterexample.
A rectangle is a four sided figure with four right angles.

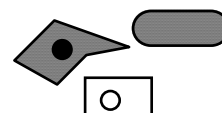
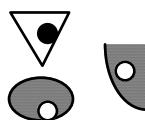
8. Determine if the statement is a good definition. If it is not, state a counterexample.
A triangle is a figure whose corners are sharp.

9. Is the following definition of parallel lines a good definition?
"Parallel lines are lines with no points in common." Explain.

10. Which figure is a swemmy?

Swemmies

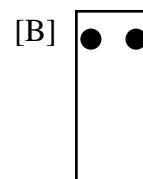
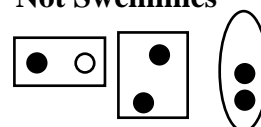
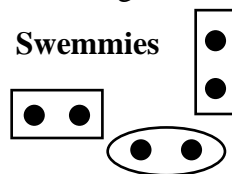
Not Swemmies



11. Which figure is a swemmy?

Swemmies

Not Swemmies



[1] a good definition

[2] a good definition

not a good definition; counterexample:

[3] Many birds also have bright colors.

not a good definition; counterexample:

[4] Ovals or ellipses are also round.

not a good definition; counterexample:

[5] Rectangles also have four right angles.

not a good definition; counterexample:

[6] Helium balloons also float.

[7] a good definition

not a good definition; counterexample: Star

[8] shapes also have sharp corners.

Answers may vary. Sample: No, because
skew lines also have no points in common.

You also need to specify that the lines lie in

[9] the same plane.

[10] C

[11] C