



# Puzzle Time

Name: \_\_\_\_\_ Per: \_\_\_\_\_

## How Do You Make Seven Even?

Circle the letter of each correct answer in the boxes below. The circled letters will spell out the answer to the riddle. Show all your work.

Complete the sentence.

1. A(n) \_\_\_\_\_ line segment  $\overline{AB}$  is a segment that represents moving from point  $A$  to point  $B$ .
2. In a coordinate plane, two nonvertical lines are parallel if and only if they have the \_\_\_\_\_.
3. In a coordinate plane, two nonvertical lines are perpendicular if and only if the product of their \_\_\_\_\_.

Tell whether the lines through the given points are (1) parallel, (2) perpendicular, (3) neutral, (4) directed, (5) indirective, (6) none of these. (Hint: three of these words are fake)

4. Line 1:  $(-7, -3), (1, 4)$ ; Line 2:  $(-6, 6), (1, -2)$
5. Line 1:  $(-4, -2), (4, 5)$ ; Line 2:  $(-2, 3), (2, -3)$
6. Line 1:  $(0, 4), (-6, 0)$ ; Line 2:  $(3, 2), (-3, -2)$

Find the distance from point  $A$  to the given line. Round to the nearest tenth.

(Hint: What would the  $y$ -intercept be?)

7.  $A(-4, 4), y = 0.8x - 0.4$
8.  $A(-3, -3), y = 0.5x + 6.5$

R	D	N	R	P	O	M	A
5	2	6.4	slopes is $-1$	slopes is $-\frac{1}{2}$	5.9	straight	3
P	T	L	H	L	I	E	S
7.2	1	6.7	same slope	slopes is $0$	4	directed	6