2015-2016 WWMS 8th Grade Mathematics Study Guide: Unit 6 Say it With Symbols

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_\_\_\_\_\_

1. The 8th graders are selling T-shirts and caps to raise money for their end-of-the-year party. The profit from the fundraiser depends on the number of caps and the number of t-shirts sold. To plan for the fundraiser, class officers need to know how many T-shirts and caps to order and sell. The 8th graders can make a $5 profit per t-shirt and a $10 profit per cap. The goal is to raise $600. Write an equation you could use to find the profit *P* if the students sell *s* shirts and *c* caps (8.EE.C.8c).
2. Find a value for *s* and *c* that would earn a profit (*P*) of $600.00 (8.EE.C.8b).

Write the following equations in slope-intercept form (8.EE.C.8b):

\*\*\*Remember to put a shape around your answer so it is easily identifiable.

1. 2*x* – *y* = 17
2. *x* – *y* = 10
3. -*x* – 7*y* = 9
4. -2*x* – *y* = 9

Write the following equation in standard form (8.EE.C.8b):

1. *y* = *-x* + 2
2. 3*y* = -4*x* + 6
3. Graph the two equations below to find the solution to the system (8.EE.C.8b).

\*\*\*Remember to put a shape around your answer so it is easily identifiable.

*y* = 3*x* *y* = 4*x*

\*\*\*Remember to put a shape around your answer so it is easily identifiable.

1. Find the solution to the system (8.EE.C.8b):

*y* = $-\frac{2}{3}$*x*$- \frac{4}{3}$ *y* = $-\frac{5}{3}$*x*– $\frac{7}{3}$

1. Find the solution to the system below (8.EE.C.8b):

*y* = 5*x* – 2 *y* = $\frac{1}{2}$*x* – 2