

Algebra 1 – 4.3 Follow up Lesson Worksheet

Name: _____ Hour: _____

Solve the following problems.

For problems 1-2 use example 1 from the notes as a guide when needed.

1. Write the equation of the line that passes through $(7, -2)$ and is parallel to a line that has a slope of $\frac{3}{8}$.
2. Line B and C are perpendicular. Line B has a slope of -10 . Line C passes through $(6, -1)$. Write an equation for line C.

For problems 3-4 use example 2 from the notes as a guide when needed.

3. Write the equation of the line that has a y-intercept of 12 and is parallel to the line $y = -x + 1$.
4. Line 1's equation is $y = \frac{9}{4}x - 18$. Line 2 is perpendicular to line 1 and crosses the y-axis at $(0, -5)$. Write the equation for line 2.

For problems 5-6 use example 3 from the notes as a guide when needed.

5. Two lines are parallel. The first line's equation is $y - 1 = -\frac{5}{2}(x + 7)$. The second line has a y-intercept of -2 . Write the equation for line 2.
6. Line 1 is written as $y + 11.5 = -6(x - 1)$. Line 2 has a y-intercept of π . Line 1 and 2 are perpendicular. Write an equation for line 2.

For problems 7-8 use example 4 from the notes as a guide when needed.

7. $f(x) = 3x + 12$. $f(x)$ and $g(x)$ are perpendicular. $g(x)$ passes through $(\frac{1}{3}, -7)$. Write the equation for $g(x)$.
8. $k(x)$ and $p(x)$ are parallel. $k(x)$ passes through $(-2, 3)$ and $p(x) = -\frac{2}{3}x - 10$. Write the equation for $k(x)$.

For problems 9-10 use example 5 from the notes as a guide when needed.

9. Two lines are perpendicular. One of the lines passes through $(0, 7)$ and $(-3, 4)$. The second line passes through $(5, -1)$. Write the equation for the second line.
10. Line F and L are parallel. F passes through the origin and is horizontal. L passes through $(-5, -9)$. Write the equation for L.