Equations of Lines

Do all work on notebook paper. All steps should be shown. All work should be neat and organized.

Find the equations of the following lines. Write answers in slope-intercept form.

1. \( m = 5 \); y-intercept = \( \frac{1}{2} \)
2. \( m = 1 \); y-intercept = \(-9\)
3. \( m = \frac{1}{2} \); y-intercept = \(-3\)
4. \( m = 0 \); y-intercept = \(11\)
5. \( m = 0 \); y-intercept = \(\frac{2}{5}\)

Find the equations of the following lines. Write answers in slope-intercept form when possible.

6. \( m = 3 \); through \((-1, -2)\)
7. \( m = \frac{9}{2} \); through \((3, 8)\)
8. \( m = -\frac{2}{3} \); through \((5, 3)\)
9. \( m = 0 \); through \((4, -12)\)
10. \( m \) is undefined; through \((3, 7)\)

Find the equations of the lines passing through the given points. Write answers in slope-intercept form when possible.

11. \((-2, 4)\) and \((-5, 7)\)
12. \((-8, 6)\) and \((4, -3)\)
13. \((0, 0)\) and \((-2, 3)\)
14. \((8, -4)\) and \((-3, -4)\)
15. \((5, 3)\) and \((5, -6)\)