## Slopes of Parallel and Perpendicular Lines - Independent Practice Worksheet

Complete all the problems.

1. Line c has a slope of  $\frac{-8}{6}$ . Line d has a slope of  $\frac{-8}{6}$ .

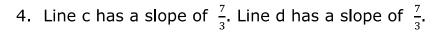
Are line c and line d parallel or perpendicular?

2. Line c has a slope of  $\frac{-10}{8}$ . Line d has a slope of  $\frac{8}{10}$ .

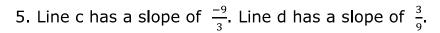
Are line c and line d parallel or perpendicular?

3. Line c has a slope of  $\frac{-12}{4}$ . Line d has a slope of  $\frac{4}{12}$ .

Are line c and line d parallel or perpendicular?



Are line c and line d parallel or perpendicular?



Are line c and line d parallel or perpendicular?

- 6. The equation for line j can be written as  $y = \frac{7}{5}x 8$ . Line k, which is parallel to line j, includes the point (3, 5). What is the equation of line k?
- 7. The equation for line j can be written as  $y = \frac{6}{4}x 14$ . Line k, which is parallel to line j, includes the point (2, 4). What is the equation of line k?
- 8. The equation for line j can be written as  $y = \frac{9}{3}x 12$ . Line k, which is perpendicular to line j, includes the point (-6, 8). What is the equation of line k?
- 9. The equation for line j can be written as  $y = \frac{5}{2}x 10$ . Line k, which is perpendicular to line j, includes the point (-7, 10). What is the equation of line k?
- 10. The equation for line j can be written as  $y = \frac{4}{2}x 6$ . Line k, which is perpendicular to line j, includes the point (-3, 9). What is the equation of line k?

