

Name \_\_\_\_\_

Date \_\_\_\_\_

**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?

4. Line c has a slope of  $\frac{7}{3}$ . Line d has a slope of  $\frac{7}{3}$ .

Are line c and line d parallel or perpendicular?

5. Line c has a slope of  $-\frac{9}{3}$ . Line d has a slope of  $\frac{3}{9}$ .

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?

