

## Number of Solutions to Systems of Equations

No Calculator

1. What is a value of  $k$  that produces no solutions?  $-x-5y=-15$        $kx+3y=31$
2. What is a value of  $k$  that produces no solutions?  $-x-5y=28$        $kx+y=7$
3. What is a value of  $k$  that produces no solutions?  $-5x+y=34$        $kx-4y=14$
4. What is a value of  $k$  that produces no solutions?  $3x+2y=-33$        $kx-4y=-4$
5. What is a value of  $k$  that produces no solutions?  $4x-y=27$        $kx-2y=19$
6. What is a value of  $k$  that produces no solutions?  $3x-5y=-22$        $kx-4y=-24$
7. What is a value of  $k$  that produces no solutions?  $4x-4y=20$        $kx+4y=-18$
8. What is a value of  $k$  that produces no solutions?  $-x-y=-4$        $kx+4y=-8$
9. What is a value of  $k$  that produces no solutions?  $-4x-y=5$        $kx+2y=-6$
10. What is a value of  $k$  that produces no solutions?  $-3x+3y=-27$        $kx+3y=15$
11. What is a value of  $k$  that produces infinite solutions?  $-2x-5y=-20$        $kx-5y=-20$
12. What is a value of  $k$  that produces infinite solutions?  $2x-3y=0$        $kx-3y=0$
13. What is a value of  $k$  that produces infinite solutions?  $-5x+2y=7$        $kx-2y=-7$
14. What is a value of  $k$  that produces infinite solutions?  $-3x+2y=14$        $kx+2y=14$
15. What is a value of  $k$  that produces infinite solutions?  $-4x+5y=23$        $kx-5y=-23$
16. What is a value of  $k$  that produces infinite solutions?  $2x-2y=-18$        $kx-10y=-90$
17. What is a value of  $k$  that produces infinite solutions?  $3x-2y=33$        $kx+10y=-165$
18. What is a value of  $k$  that produces infinite solutions?  $5x+y=18$        $kx-4y=-72$
19. What is a value of  $k$  that produces infinite solutions?  $4x-2y=0$        $kx-4y=0$
20. What is a value of  $k$  that produces infinite solutions?  $-2x+2y=-4$        $kx+2y=-4$

1.  $k=3/5$
2.  $k=1/5$
3.  $k=20$
4.  $k=-6$
5.  $k=8$
6.  $k=12/5$
7.  $k=-4$
8.  $k=4$
9.  $k=8$
10.  $k=-3$
11.  $k=-2$
12.  $k=2$
13.  $k=5$
14.  $k=-3$
15.  $k=4$
16.  $k=10$
17.  $k=-15$
18.  $k=-20$
19.  $k=8$
20.  $k=-2$