

Name _____



Date _____

Linear Equations

State whether the lines are parallel, perpendicular, or neither.

1. $15x - 7y = 55$ $x = \frac{11}{3} + \frac{7}{15}y$	2. $x = \frac{10}{19}y - \frac{786}{19}$ $y = \frac{-10}{19}x + \frac{387}{19}$	3. $-12x = -417 + 27y$ $y = \frac{-4}{9}x + \frac{139}{9}$
4. $y = \frac{-12}{11}x + \frac{531}{11}$ $3x + 4y = 144$	5. $3x + y = -110$ $y = \frac{-1}{3}x - \frac{106}{3}$	6. $y = \frac{-16}{13}x - \frac{396}{13}$ $-51y = 1458 + 15x$
7. $\frac{3x + 14y}{2} = -17$ $\frac{-216}{7} + \frac{3}{14}y = x$	8. $4x + 9y = 116$ $14x - y = -114$	9. $y = -12x - 234$ $8x + y = -162$
10. $13x + 16y = -196$ $\frac{-392}{3} = \frac{32}{3}y + \frac{26}{3}x$	11. $8x + 9y = -408$ $y = \frac{9}{8}x - \frac{133}{4}$	12. $y = \frac{-2}{3}x + \frac{154}{3}$ $\frac{-3}{2}y + 77 = x$