

## Worksheet 15L

Find the equation of the line: (No graphs required)

- ① parallel to  $y = \frac{3}{4}x - 5$  through the midpoint of  $(-3, 5)$  and  $(9, 15)$
- ② perpendicular to  $y = -\frac{3}{7}x + \frac{4}{19}$  through the midpoint of  $(6, 4)$  and  $(-8, 2)$
- ③ parallel to  $-5x - 3y = 7$  through the midpoint of  $(-8, 4)$  and  $(1, 6)$ .
- ④ perpendicular to  $8x + 4y = 5$  through the midpoint of  $(12, 6)$  and  $(5, -4)$
- ⑤ parallel to the line containing  $(-3, 5)$  and  $(5, -11)$  through the midpoint of  $(-3, 5)$  and  $(5, -11)$