

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Formulas**

Slope

Equation of a line

Parallel

Perpendicular

1. Convert the equation  $-4y + 10x - 18 = 0$  into ' $y = ax + b$ ' form.

2. What is the slope of the line between points  $A(-3, -6)$  and  $B(6, 9)$ ?

3. What is the equation of a line with a slope of  $-\frac{1}{2}$  and that passes through point  $A(-5, 28)$ ?

4. What is the equation of the line running between points  $A (-3, -6)$  and  $B (6, 9)$ ?

5. What is the equation of a line passing through  $A (-12, 16)$ , travelling *parallel* to the line defined by the equation  $-12x + 5y - 40 = 0$ ?

6. What is the equation of a line passing through  $A (-4, -6)$ , travelling *perpendicular* to the line defined by the equation  $-6x + 12y - 40 = 0$ ?

7. Where do the lines defined by the following equations intersect (meet)?

$$3y = -5x + 9 \quad \text{and} \quad 6y - 4x + 24 = 0$$

