Worked Example

Find the gradient of a slope that runs through the following points: (-7,9) and (12, -15)

(-7,9) is the left most point so this becomes point 1: $x_1 = -7$, $x_2 = 12$, $y_1 = 9$, $y_2 = -15$.

$$m = \frac{Rise}{Run} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-15 - 9}{12 - (-7)} = \frac{-15 - 9}{12 + 7} = \frac{-24}{19}$$

So the slope is negative (from top left to bottom right) and has a gradient of $\frac{-24}{19}$.

Find the gradient of the following slopes:

a) (3,7) and (13, 27)
b) (5,9) and (-5, 18)
c) (23, 31) and (44, 52)
d) (8,7) and (-6, 17)
e) (-17,-9) and (-7 and 12)