



$$a, \frac{5.8^2 - 3.1^2}{3 \times 3.1 \times 5.8} = 0.445$$

$$b, y = x^3 + 2$$

$$\frac{dy}{dx} = 3x^2$$

$$c, \int \frac{3}{x} = \ln 3x$$

$$c, x^2 = 5x$$

$$x = 5$$

$$d, \int \frac{3 dx}{x} = \ln 3x$$

$$e, \frac{3x - 2x - 5}{2} = 6$$

$$6x - 2x - 5 = 12$$

$$4x - 5 = 12$$

$$4x = 17$$

$$x = 4\frac{1}{4}$$



$$f, \quad x - 2y = 8 \dots \textcircled{1}$$

$$2x + y = 1 \dots \textcircled{2}$$

add $\textcircled{1}$ and $\textcircled{2}$

$$3x - y = 9$$

$$3x = 9 + y$$

$$3x - 9 = y \dots \textcircled{3}$$

sub $\textcircled{3}$ into $\textcircled{2}$

$$2x + (3x - 9) = 1$$

$$5x - 9 = 1$$

$$5x = 10$$

$$x = 2$$

$$4 + y = 1$$

$$y = -3$$

$$\therefore x = 2, y = -3$$