

Worked example

Find the gradient of:

$$x = (1 + 2y)^3 \text{ when } y = 1$$

$$x = (3y^2 - 2)^4 \text{ at } (1, -1)$$

Your turn

Find the gradient of:

$$x = (2y^3 - 3)^5 \text{ at } (-1, 1)$$

30

Worked example

Find $\frac{dy}{dx}$ when:

$$x = 2y^2 + y$$

$$x = 3y^4 - y^2 - 1$$

Your turn

Find $\frac{dy}{dx}$ when:

$$x = 4y^3 - y + 2$$

$$\frac{1}{12y^2 - 1}$$