

1

$$f(x) = x^2$$

$$F(x) = \frac{x^3}{3} + C \quad (\underline{\underline{\text{Svar}}})$$

2

$$(a) \frac{3x+24}{2x+16} = \frac{3(x+8)}{2(x+8)} = \frac{3}{2}$$

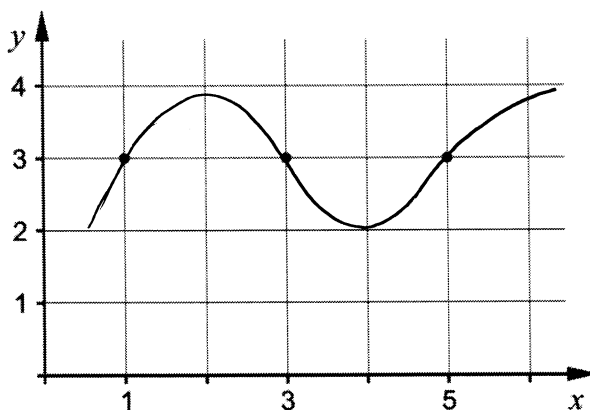
$$(b) x(x^8+2) + 2x^9 - 2x = x^9 + 2x + 2x^9 - 2x = \underline{\underline{3x^9}}$$

3

$$\underline{\underline{\text{Svar}}}: B \quad (|-3| = -(-3) = 3)$$

4

Till exempel:

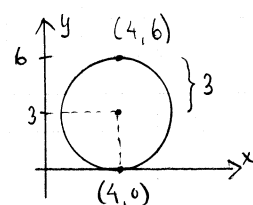


5

Medelpunkt i  $(4, 3)$  och radie 3. Då blir cirkelns ekvation

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

$$(x-4)^2 + (y-3)^2 = 9 \quad (\underline{\underline{\text{Svar}}})$$



6

$$(a) f(x) = 3x^4 - 7x + 5$$

$$f'(x) = 12x^3 - 7 \quad (\underline{\underline{\text{Svar}}})$$

$$(b) f(x) = x^k + k$$

$$f'(x) = kx^{k-1} \quad (\underline{\underline{\text{Svar}}})$$

$$(c) f(x) = \frac{x + 5x^2}{x} = \frac{x(1 + 5x)}{x} = 1 + 5x$$

$$f'(x) = 5 \quad (\underline{\underline{\text{Svar}}})$$