

$$19, 20, 22$$

$$14. f(0) = -2 \quad f(2) = 4$$

$$(0, -2) \quad (2, 4)$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - (-2)}{2 - 0} = \frac{6}{2} = 3$$

$$4 = 3(2) + b$$

$$4 = 6 + b$$

$$b = -2$$

$$f(x) = 3x - 2$$

$$20. f(-1) = 2 \quad f(2) = 2$$

$$(-1, 2) \quad (2, 2)$$

$$y = 2 \quad f(x) = 2$$

$$m = \frac{2 - 2}{2 - (-1)} = \frac{0}{3} = 0$$

$$2 = 0(-1) + b$$

$$2 = b$$

$$f(x) = 0x + 2$$

$$f(x) = 2$$

$$22. f(3) = 4 \quad f(6) = -3$$

$$(3, 4) \quad (6, -3)$$

$$m = \frac{-3 - 4}{6 - 3} = \frac{-7}{3}$$

$$y = mx + b$$

$$-3 = \frac{-7}{3}(6) + b$$

$$-3 = \frac{-14}{+14} + b$$

$$b = 11$$

$$f(x) = \frac{-7}{3}x + 11$$

HW Assessment
12/1

18. $f(2) = 6$ $f(4) = 0$
find $f(x)$

Polynomials

$$3x^5y^2 + 4x^2y - 3xy^3 + 4x - 2$$

Simplified

- 1) like terms are combined
- 2) terms are in order

like terms:
exact same var & exponents

$$5x^3y \quad 3x^3y \quad \cancel{5x^3y}$$

$$\underbrace{5x^2} \quad \cancel{3xy} \quad \underbrace{4x^2} \quad \cancel{-3xy} \quad -7x$$

$$-4x^2y^2 + 16x^2y^2 = 12x^2y^2$$

Order / Degree

0th order: $44, -2, \pi, 5342^{10}$

1st order: $5x, -2y, x, z, -15z$

2nd order: $4xy, -3x^2, z^2$

3rd order: abc, a^2b, b^3, ab^2

$$7x^4y^3 : 7th$$

$$-5x^2yz : 4th$$

$$-2x^4y : 5th$$

$$-5xy^3z^2a^4 : 10th$$

$$\cancel{x^3y} - \underline{6xy^4} + 2x^3y - \cancel{xy^3} + \underline{3xy^4} - 4x^2y$$

$-3xy^4$	$+2x^3y$	$-4x^2y$
5th	4th	3rd

