

Name: _____

Date: _____

Pre Calculus 11: Prerequisite Lesson: Basic Math Skills Required for PC11

1. Solve for "x"

a) $4x = 10$	b) $3x - 8 = 1$	c) $\frac{4x}{3} = 5$
d) $3x + 2 = 6$	e) $-\frac{3x}{2} + 1 = 8$	f) $\frac{3}{2}x + 11 = 6$
g) $7x - 3 + 8x = 10$	h) $3(3x - 12) + 1 = 6$	i) $3(5x + 7x) - 8x = 12$
j) $\frac{3x}{5} + 11 = 6x$	k) $\frac{7x}{3} + 8 = 3(2x + 4)$	l) $-\frac{5x}{3} + 6 = 7x + 1$

2. Given each equation below, indicate the slope and Y-intercept

a) $y = 3x - 12$	b) $y = \frac{12x}{3} - \frac{7}{5}$	c) $4x + 3y = 22$
d) $-3y + 7x = 12$	e) $-\frac{9x}{4} + 12 = 3y$	f) $3y = \frac{7x - 11}{3}$

3. Simplify each of the expressions below using BEDMAS:

a) $4 + 2(7)^2$	b) $7 \times (3 - 4)^2 + 1$	c) $7^2 + 3^2 - 1^2$
d) $3 - 3^2 \times 4^3$	e) $-3^4 + 2 \times 3^2$	f) $\frac{(-3)^3 \times -2}{-3^2}$
g) $9(3)^2 - 2 \times 3^3$	h) $9 - 2 \times 4^2$	i) $7 - 3 \times (\sqrt{8})^3$

4. Isolate the indicate variable for each of the following equations:

a) $ax + by - c = 0$ "x"	b) $\frac{ax + b}{c} = d$ "x"	c) $\frac{a - bx}{d} + e = f$ "x"
d) $\frac{a - x}{c - x} = b$ "x"	e) $\frac{a - bx}{c - dx} + e = f$ "x"	f) $\frac{ax^2 + b}{c} + e = f$ "x"