

Math Review

Lesson 1 – Introductory Unit

Part One: Solve for the unknown variable.

1) $3x + 2 = 14$

2) $4x + 3x + 7 = 21$

3) $4 + 3t = -6 - 2t$

4) $2(x + 1) = 4$

5) $\frac{a}{3} + 4 = 27$

6) $10 + 4g - g = 37$

7) $2(3f + 4) = 26$

8) $3(h - 4) = 2(h + 6)$

9) $13 + 8 = 21 - 2 + 4x$

10) $3(3m + 1) = 3m + 1 - 4(m + 2)$

Part Two: Isolate the specified variable in each equation:

11) Solve for b:

$P = a + 2b + 3c$

12) Solve for y:

$Ax + By = C$

13) Solve for p:

$I = prt$

14) Solve for l:

$2l + 2w = 60$

15) Solve for r:

$A = p + prt$

Part Three: Complete the following table:

	General equation	Slope-Intercept Form	Slope	y-intercept	x-intercept
16)			7	-3	
17)			$-\frac{2}{3}$	8	
18)	$3x + 4y = 12$				
19)	$2(3x + 4) + 3(2y - 3) = 5$				

Answers:

$$1) \quad x = 4$$

$$2) \quad x = 2$$

$$3) \quad t = -2$$

$$4) \quad x = 1$$

$$5) \quad a = 69$$

$$6) \quad g = 9$$

$$7) \quad f = 3$$

$$8) \quad h = 24$$

$$9) \quad x = \frac{1}{2}$$

$$10) \quad m = -1$$

$$11) \quad b = \frac{P-a-3c}{2}$$

$$12) \quad y = \frac{c-Ax}{B}$$

$$13) \quad p = \frac{1}{rt}$$

$$14) \quad l = 30 = w$$

$$15) \quad r = \frac{A-p}{pt}$$

$$16) \quad \text{slope} - \text{int.}: y = 7x - 3; \quad x - \text{int}: 3/7$$

$$17) \quad \text{slope} - \text{int.}: y = -2/3x + 8; \quad x - \text{int}: 12$$

$$18) \quad \text{slope} - \text{int.}: y = -3/4x + 3; \quad \text{slope}: -3/4; \quad y - \text{int}: +3; \quad x - \text{int}: 4$$

$$19) \quad \text{slope} - \text{int.}: y = -x + 1; \quad \text{slope}: -1; \quad y - \text{int}: +1; \quad x - \text{int}: 1$$