

SWQ 1 Study Guide (Term 2)

2018-2019

Program	DLM & WRN	Date	
Grade/Level	07 / DLM & WRN	Time	60 minutes
Subject/Code	Mathematics (MAT20)	Section	
Student Name		Student #	

I. Encircle the letter of the best answer.

- If $x = -3$ and $y = -5$, what does $3x - 2y$ equal?
 - 19
 - 1
 - 1
 - 19
- Which multiplication property is shown by the equation $f + 2 = 2 + f$?
 - Associative
 - Distributive
 - Commutative
 - Identity
- What is the value of the expression $-2(5 + 4)$?
 - 21
 - 18
 - 2
 - 18
- Which expression is equivalent to $-6(x - 7)$?
 - $6x + 42$
 - $-6x + 42$
 - $-6x - 42$
 - $6x - 42$
- Simplify $x + 4 - 5x - 2$.
 - $-5x + 2$
 - $-5x - 2$
 - $-4x + 2$
 - $-4x - 2$
- Add $(11x + 2) + (9x - 4)$.
 - $20x - 6$
 - $20x - 2$
 - $2x - 6$
 - $2x - 2$
- Which pairs of monomials have a GCF of $4a$?
 - $8a$ and $18a$
 - $16a$ and $8b$
 - $34a$ and $12a$
 - $28a$ and $20a$
- What is the solution of $-3 = x + 5$?
 - 15
 - 8
 - 2
 - 8

9. Which operation should you use to solve $-6x = -24$?
- addition
 - Subtraction
 - Multiplication
 - Division

10. Which of the following solution is true for $\frac{x}{3} = -4$?
- $-\frac{4}{3}$
 - -12
 - 12
 - $\frac{3}{4}$

II. Answer the following.

1. Evaluate each expression if $r = 1$, $s = -2$, $t = 7$, and $u = 3$.

a. $s + 7$

c. $6 + 10u$

b. $11r - t$

2. Determine if two expressions in each pair are equivalent. If they are equivalent, write the property.

	Equivalent? (Yes or No)	Property
$(5 + a) + 8 = 5 + (a + 8)$		
$1 \times c = c$		
$-5(a + 3) = -5a + 3$		
$(7 + g) + 5 = (g + 7) + 5$		

3. Simplify the following algebraic expressions.

a. $3b + 8 + 2b$

b. $10k - k$

4. Find the sum or difference.

a. $(9x + 7) + (x + 3)$

d. $(3x - 2) - (5x - 4)$

b. $(-6x + 3) + (-5x - 4)$

e. $(9x - 8) - (x + 4)$

c. $2(x + 14) + (2x - 14)$

f. $(-x + 3) - (x - 5)$

5. Factor each expression. If the expression cannot be factored, write *prime*.

a. $12x + 3$

c. $130x - 13$

b. $6x - 12$

d. $33c - 55cd$

6. Solve each equation.

a. $a + 4 = 11$

d. $n + 7.1 = 8.6$

b. $x - 3 = -2$

e. $c - 5.3 = -6.4$

c. $m - 7 = 1$

f. $\frac{5}{12} + p = \frac{7}{12}$

g. $-\frac{1}{3} = -\frac{5}{6} + u$

l. $\frac{u}{7} = 3$

h. $4c = 16$

m. $\frac{t}{-12} = 11$

i. $32 - -2f$

n. $\frac{q}{5.5} = 3.2$

j. $-9x = -63$

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

k. $0.6q = 3.6$

7. The sum of the measures of the interior angles of a trapezoid is 360° . Write an equation to find the missing measure.

