Class Name : **MATH 1050/1051 Fall 2018**

Instructor Name : **Nguyen**

Student Name : _____

Instructor Note :

1. Use $<$, $>$, or $=$ to compare the following numbers.

$11 \square 1$

$-6 \square 6$

$-4 \square -2$

2. Classify each number below as an integer or not.

	Integer?	
	Yes	No
$-\frac{72}{8}$	○	○
$\frac{8}{3}$	○	○
-62.26	○	○
-46	○	○
430.28	○	○

3. Classify each number below as a rational number or an irrational number.

	rational	irrational
$-\sqrt{81}$	○	○
π	○	○
$\sqrt{3}$	○	○
$-67.\overline{13}$	○	○
$-\frac{15}{6}$	○	○

4. Add.

$$-\frac{2}{7}+\frac{1}{3}$$

Write your answer in simplest form.

5. Multiply.

$$\frac{-3}{8}\cdot\frac{-2}{-7}\cdot 3$$

Write your answer in simplest form.

6. Evaluate the following.

$$\left|\,|14|-|5-5|\,\right|$$

7. Evaluate.

$(-4)^3 =$ ▯

$(-7)^2 =$ ▯

8. Evaluate.

$-6^3 =$ ▯

$(-3)^3 =$ ▯

9. Evaluate.

$-\left(1-2^3\right)^2+2\cdot 2$

10. Evaluate the expression when $a=-7$ and $c=6$.

$-c+9a$

11. Evaluate the expression when $a=3$.

a^2-8a+4

12. Simplify.

$-2(u+1)+4$

13. Simplify.

$$3y-(-3z+2y)-6z$$

14. Simplify.

$$y^5 \cdot y \cdot y^3$$

15. Multiply.

$$3u^3 \cdot 2x^4 u^7 \cdot 3x$$

Simplify your answer as much as possible.

16. Simplify.

$$\left(w^4\right)^4$$

Write your answer without parentheses.

17. Simplify.

$$(2z)^3$$

Write your answer without parentheses.

18. Simplify.

$$\left(-3x^2y\right)^4$$

Write your answer without parentheses.

19. Simplify.

$$\left(\frac{a^4}{-2b^2}\right)^5$$

Write your answer without parentheses.

20. Simplify.

$$\left(-x^2y^3z\right)\left(2x^2y^4z^2\right)^2$$

21. Evaluate the expressions.

$$-(9)^0 =$$

$$-2\left(\frac{3}{5}\right)^0 =$$

22. Rewrite the following without an exponent.

$$\left(\frac{7}{9}\right)^{-1}$$

23. Rewrite the following without an exponent.

$$(-6)^{-1}$$

24. Simplify.

$$(5v-2)-\left(3v^2-7v-2\right)$$

25. Use the distributive property to remove the parentheses.

$$4z^5(9z+3z^8)$$

Simplify your answer as much as possible.

26. Multiply.

$$(y-6)(y+2)$$

Simplify your answer.

27. Multiply.

$$(5a-3b)(7a-3b)$$

Simplify your answer.

28. Multiply.

$$(4+u)(4-u)$$

Simplify your answer.

29. Rewrite without parentheses and simplify.

$$(2+w)^2$$

30. Multiply.

$$(7y-2)(6y-6u-7)$$

Simplify your answer.

31. Subtract.

$$-\frac{a+10b}{2a}-\frac{6a-8b}{2a}$$

Simplify your answer as much as possible.

32. Simplify.

$$\frac{\frac{7}{6}+1}{1-\frac{10}{7}}$$

33. Simplify.

$$\sqrt{49y^{16}}$$

Assume that the variable y represents a positive real number.

34. Find the value of $\sqrt[3]{27}$.

35. Simplify.

$$\sqrt{28}$$

36. Simplify.

$$\sqrt{20v^{16}}$$

Assume that the variable v represents a positive real number.

37. Simplify.

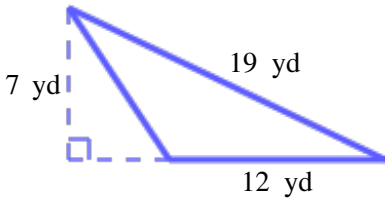
$$\sqrt{8s^{11}t^{10}}$$

Assume that all variables represent positive real numbers.

38. Write the following in simplified radical form.

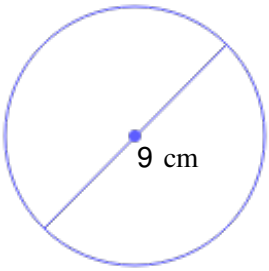
$$\sqrt[5]{160}$$

39. Find the area of the triangle below.
Be sure to include the correct unit in your answer.

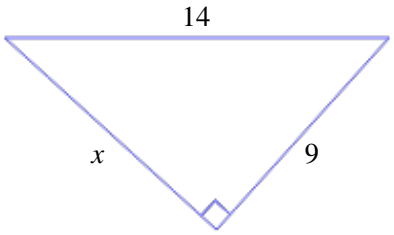


40. Find the circumference and the area of a circle with diameter 9 cm.

Use the value 3.14 for π, and do not round your answers. Be sure to include the correct units in your answers.



41. For the following right triangle, find the side length x. Round your answer to the nearest hundredth.



Obj. 1 #5 Answers for class MATH 1050/1051 Fall 2018

1.

$11 > 1$

$-6 < 6$

$-4 < -2$

2.

	Integer?	
	Yes	No
$-\frac{72}{8}$	◉	○
$\frac{8}{3}$	○	◉
-62.26	○	◉
-46	◉	○
430.28	○	◉

3.

	rational	irrational
$-\sqrt{81}$	◉	○
π	○	◉
$\sqrt{3}$	○	◉
$-67.\overline{13}$	◉	○
$-\frac{15}{6}$	◉	○

4. $\frac{1}{21}$

5. $-\frac{9}{28}$

6. 14

7.

$(-4)^3 = -64$

$(-7)^2 = 49$

8.

$-6^3 = -216$

$(-3)^3 = -27$

9. -45

10. -69

11. -11

12. $-2u+2$

13. $y-3z$

14. y^9

15. $18u^{10}x^5$

16. w^{16}

17. $8z^3$

18. $81x^8y^4$

19. $-\dfrac{a^{20}}{32b^{10}}$

20. $-4x^6y^{11}z^5$

21.

$$-(9)^0 = -1$$

$$-2\left(\frac{3}{5}\right)^0 = -2$$

22. $\dfrac{9}{7}$

23. $-\dfrac{1}{6}$

24. $-3v^2 + 12v$

25. $36z^6 + 12z^{13}$

26. $y^2 - 4y - 12$

27. $35a^2 - 36ab + 9b^2$

28. $16 - u^2$

29. $4 + 4w + w^2$

30. $42y^2 - 42yu - 61y + 12u + 14$

31. $\dfrac{-7a - 2b}{2a}$

32. $-\dfrac{91}{18}$

33. $7y^8$

34. 3

35. $2\sqrt{7}$

36. $2v^8\sqrt{5}$

37. $2s^5t^5\sqrt{2s}$

38. $2\sqrt[5]{5}$

39. Area: 42 yd^2

40.

Circumference: 28.26 cm

Area: 63.585 cm^2

41. 10.72