6.1-6.4 Homework-Megan Rourke

St Da	Student: Instructor: Megan Noun Date: Course: MATH 1500 - C	ke Assignment: 6.1-6.4 Homework				
1.	1. Use either < or > to make this a true statement.					
	12 18					
	12 18					
2.	2. Insert < or > between the pair of integers to make a true statement.					
	- 24 - 34					
	- 24 34					
3.	3. Use either < or > to make this a true statement.					
	- 11 0					
	- 11 0					
4.	Make the statement true by replacing the symbol with either the > or < symbol.					
	-10.3 $-10\frac{1}{3}$					
	$-10.3(1)$ $-10\frac{1}{3}$					
	(1) >					
	∪ <					

5. Make a number line and mark the points indicated.



6. Make a number line and mark the points indicated.



10. Find the sum.

$$-3 + (-13)$$

 $-3 + (-13) =$

11. Add.



12. Add.



13. Add.



(Simplify your answer. Type an integer, proper fraction, or mixed number.)

14. Add.



$$-4\frac{4}{5}+3\frac{9}{10}=$$

(Simplify your answer. Type an integer, proper fraction, or mixed number.)

15. Add.

-4+1+(-9)

-4+1+(-9)=

16.	Add.					
	(- 2214) + (5871)					
	(- 2214) + (5871) = (Simplify your answer.)					
17.	In a city the temperature stood at 15 degrees below zero (– 15°) at 2 p.m. Over the next 5 hours the temperature rose 4 degrees, dropped 5 degrees, rose 8 degrees, dropped 2 degrees, and finally dropped 3 degrees. What was the temperature at 7 p.m.?					
	The temperature at 7 p.m. was°.					
18.	An individual's checking account contained \$378 on June 1. The individual then made the following transactions. The individual deposited \$160, withdrew \$225, withdrew \$34, deposited \$120, withdrew \$365, and deposited \$760. What was the individual's new balance after these transactions?					
	The individual's new balance after these transactions is \$					
19.	Evaluate.					
	4 - 5					
	4 - 5 =					
20.	Evaluate.					
	5 - (- 7)					
	5 - (- 7) =					
21.	Find the value of the following expression.					
	- 5 - (- 14)					
	-5-(-14)=					
22.	Find the value of the following expression.					
	8 - (- 4)					
	8 - (- 4) =					
23.	Subtract					
	- 31 - 20					

24. Perform the indicated subtraction.

	$\frac{3}{13} - \frac{5}{13}$ $\frac{3}{13} - \frac{5}{13} = $ (Type an integer or a simplified fraction.)					
25.	25. Find the difference in altitude between a mountain that has an altitude of + 3913 feet and a desert valley that has an altitude of - 389 feet.					
	The difference in altitude is ft.					
26.	The peak-to-peak voltage of an ac circuit is found by subtracting the negative peak voltage from the positive peak voltage. Calculate the peak-to-peak voltage V in the diagram shown.					
	200 V $-200 V$					
	The peak-to-peak voltage is V.					
27.	Multiply as indicated.					
	(-5)×(-13)					
	What is the product?					
	$(-5) \times (-13) =$ (Simplify your answer.)					
28.	Divide.					
	- 81 ÷ (- 9)					
	The quotient is					

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29. Multiply as indicated.

$$\left(-3\frac{1}{2}\right)\times\left(-2\frac{7}{8}\right)$$

What is the product?

$$\left(-3\frac{1}{2}\right) \times \left(-2\frac{7}{8}\right) =$$
 (Type an integer or a simplified fraction.)

30. Divide as indicated.

What is the quotient?

 $(-320) \div (-40) =$ (Type an integer or a simplified fraction.)

31. Multiply as indicated.

$$\left(-\frac{3}{8}\right) \times \left(-\frac{4}{15}\right)$$

What is the product?

$$\left(-\frac{3}{8}\right) \times \left(-\frac{4}{15}\right) =$$
 (Type an integer or a simplified fraction.)

32. Multiply as indicated.

$$(-2) \times (-8) \times (-5)$$

What is the product?

 $(-2) \times (-8) \times (-5) =$ (Simplify your answer.)

33. Multiply using a calculator and round as indicated.

 $(-0.036) \times (-0.068)$ What is the product? $(-0.036) \times (-0.068) =$ (Type an integer or decimal rounded to four decimal places as needed.) 34. An airplane descends from 38,000 ft to 14,000 ft in 12 minutes. Express its rate of change in altitude in feet per minute as a signed number. What is the rate of change in altitude? feet per minute (Simplify your answer. Type an integer or a decimal.) 35. Find the value of the following. 10⁴ $10^4 = [$ (Simplify your answer.) 36. Evaluate. 2⁵ $2^5 = [$ 37. Evaluate. 73 $7^3 = [$ 38. Evaluate. $5^4 \times 2^2$ $5^4 \times 2^2 = [$ (Simplify your answer.)

39. Perform the indicated operations by hand. Then use a calculator to check your work.

	$9 + 3^2$				
	9 + 3 ² =				
40.	Calculate.	The answer is			
	√289	(Nound to two decimal places as needed.)			
41.	Calculate. √361	The answer is (Round to two decimal places as needed.)			
42.	Calculate. √812				
	$\sqrt{812} \approx$ (Round to two decimal places as needed.)				
43.	Calculate.				
	$\sqrt{5000}$				
	$\sqrt{5000} \approx$ [Round to two decimal places as needed.)				
44.	Calculate.				
	√210				
	$\sqrt{210} \approx$ (Round to two decimal places as needed.)				

45. The velocity (in feet per second) of water discharged from a hose with a nozzle pressure of 55 psi is given by

12.14√55

Calculate and round to the nearest whole number.

The velocity of water discharged from a hose is approximately fps.



7. – 130

8. – 17.10		
9. 3		
10. – 16		
11. – 15		
12. – 35		
$^{13.}-3\frac{1}{3}$		
$\frac{14.}{-\frac{9}{10}}$		
15. – 12		
16. 3657		
17. – 13		
18. 794		
19. – 1		
20. 12		

21.9	
22. 12	
23 51	
$\frac{24}{13}$ - $\frac{2}{13}$	
25. 4302	
26. 400	
27. 65	
28.9	
$^{29.}$ 10 $\frac{1}{16}$	
30. 8	
31. <u>1</u> 10	
32 80	
33. 0.0024	

34. – 2000			
35. 10,000			
36. 32			
37. 343			
38. 2,500			
39. 18	 	 	
40. 17			
41. 19			
42. 28.5			
43. 70.71			
44. 14.49			
45. 90			