

Math Test Review

Test on Wednesday, April 30, 2008

For Exercises 1 and 2, use the following information: At 10:00 A.M. on a winter day in Fairbanks, Alaska, the temperature was -12°F . Find the temperature after each of the following temperature changes.

1. Between 6:00 P.M. and 9:00 P.M., the temperature dropped 26°F .
2. Between 9:00 P.M. and midnight, the temperature changed by -19°F .

Find the value of each expression.

3. $(-6)^2 + 3^3 - 7$

4. $2^3 + (8 - 5) \cdot 4 - 5^2$

5. $(2^3 + 8) - 5 \cdot 4 - 5^2$

6. $2^3 \cdot 3 - 5 \cdot 5^2 + 8$

7. $2^3 \cdot 3 - 5(5^2 + 8)$

8. Fill in the blanks to make the number sentences true.

a. $8 \times (6 + 4) = (8 \times \underline{\quad}) + (8 \times 4)$

b. $7 \times (x + 3) = (7 \times \underline{\quad}) + (\underline{\quad} \times 3)$

c. $(-9 \times 5) + (\underline{\quad} \times 7) = -9 \times (\underline{\quad} + 7)$

d. $(x \times 4) + (x \times 5) = \underline{\quad} \times (4 + 5)$

e. $8x + 12x = x \times (\underline{\quad} + \underline{\quad})$

Math Test Review

Test on Wednesday, April 30, 2008

9. Use the Distributive Property to write an expression equal to each of the following. Then, find the value of each expression.

a. $-3 \cdot (4 + -7)$

b. $10 \cdot (-3 + 5)$

c. $2 \cdot [2 - (-4)]$

10. The list below gives average temperatures (in °C) for Fairbanks, Alaska, for each month of the year, from January through December.

-25, -20, -13, -2, 9, 15, 17, 14, 7, -4, -16, -23

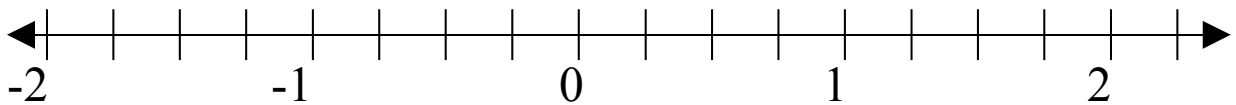
a. What is the median? b. What is the range? c. What is the mean?

9. Draw a number line and locate the points. Remember to choose an appropriate scale.

$-\frac{2}{8}$, $\frac{1}{4}$, -1.5 , $1\frac{3}{4}$

10. Find the value shown by each arrow on the number line. Choose from the list below.

-1.25 , $-\frac{1}{3}$, 1.5 , $-\frac{1}{6}$



Unit Test**Accentuate the Negative**

1. Rewrite these numbers in order from smallest to largest.

$$\frac{2}{5}, 0, -\frac{3}{2}, -\frac{9}{8}, \frac{8}{7}$$

2. Find these sums and differences.

a. $30 - ^{-}17 =$

b. $^{-}17 - ^{-}30 =$

c. $^{-}150 + 75 =$

d. $15 - 27 =$

e. $^{-}14 + ^{-}15 =$

f. $\frac{3}{4} + ^{-}\frac{1}{2} =$

3. Robert wrote $9 \times ^{-}6 - (^{-}1 + 8)$. What is the answer to Robert's calculations?

4. a. Write two subtraction sentences to complete the fact family for $^{-}8 + n = 62$.

- b. Use one of the fact family sentences to find the value of n .

5. Find these products and quotients.

a. $13 \times ^{-}7 =$

b. $^{-}8 \times ^{-}20 =$

c. $99 \div ^{-}3 =$

d. $\frac{-36}{-12} =$

e. $0 \div 18 =$

f. $\frac{1}{3} \times \frac{-5}{7} =$

Unit Test *(continued)*

Accentuate the Negative

6. Malique wants to take four of her friends to a movie. She knows it is \$5.50 for a ticket and \$3.25 for popcorn.
- How much will it cost if she pays for the movie and popcorn for all five people?
 - Write a number sentence to show how you computed the total cost.
 - Find a different way to calculate the total cost and show it in a number sentence.

7. Insert = or \neq to make the statements true.

a. $11 + ^{-}20 \square ^{-}20 + 11$

b. $12 - ^{-}10 \square ^{-}10 - 12$

c. $^{-}5 \times 2 \square 2 \times ^{-}5$

d. $^{-}16 \div ^{-}4 \square ^{-}4 \div ^{-}16$

8. Plot the following points on the grid and label each point.

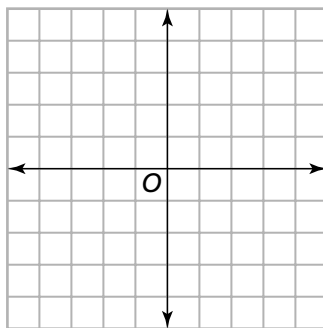
a. $(1, ^{-}5)$

b. $(2, 0)$

c. $(^{-}3, 5)$

d. $(0, ^{-}2)$

e. $(^{-}2, ^{-}2)$



Unit Test *(continued)*
.....**Accentuate the Negative**

9. The list below gives monthly average low temperatures (in degrees Fahrenheit) for International Falls, Minnesota from November through March).

Average Low Temperatures (°F) in International Falls, Minnesota

November	December	January	February	March
17	0	-9	-3	10

- a. What is the mean of these monthly low temperatures? Show your work.
-
-
-
-
-
-
-
-
-
-
- b. What is the difference between the highest and lowest temperatures?