9-25-17

Aim: SWBAT apply knowledge of integers to complete contextual word problems.

HW: Worksheets

Quiz Wednesday (add,subtract, multiply, divide)

Test next Tuesday

Do Now: Worksheet # 1 - 5

Pg. 75 # 3-22

(3) $-4(-7) = 28$ (4) $0(-9) = 0$ (5) $-3(6) = -18$ (6) $8(-5) = -40$

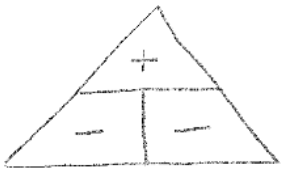
(7) $-6(7) = -42$ (8) $-1(-17) = 17$ (9) $0(-13) = 0$ (10) $-4(-11) = 44$

(11) $9(-2) = -18$ (12) $3(-5) = -15$ (13) $-15(-12) = 180$ (14) $1(-32) = -32$

(15) $-1(-2)(-3) = -6$ (16) $2(-4)(5) = -40$ (17) $10(-9)(-3) = 270$

(18) $-7(-9)(-6) = -378$ (19) $-2(5)(-6) = 60$ (20) $6(-4)(12) = -288$

(21) $-8(-7)(-5) = -280$ (22) $12(0)(-45) = 0$



Pg. 79 # 2-13

(2) $\frac{-44}{4} = -11$ (3) $\frac{0}{-7} = 0$ (4) $\frac{-81}{-9} = 9$ (5) $\frac{50}{-10} = -5$

(6) $\frac{-49}{-7} = 7$ (7) $\frac{-28}{2} = -14$ (8) $\frac{36}{-4} = -9$ (9) $\frac{-19}{-1} = 19$

(10) $\frac{-66}{-11} = 6$ (11) $\frac{-27}{0}$ = undefined (12) $\frac{-9}{6} = \frac{-3}{2}$ OR -1.5 OR $-1\frac{1}{2}$

(13) $\frac{-6}{-30} = \frac{1}{5}$

DO NOW:

Tell whether the sum of the two integers is *always, sometimes or never* positive.

1) two negative integers never

2) a positive integer and a negative integer sometimes

3) two positive integers always

4) a positive integer and zero always

5) a negative integer and zero never

CLASSWORK:

Read each problem carefully, write a number sentence and solve.

1) The temperature one morning in Juneau, Alaska was -12°F. By the afternoon, the temperature had risen 8°F. What was the temperature in the afternoon?

$-12 + 8 = -4$

2) You withdraw $400 from your savings account. Then you withdraw $250 more. How much did you withdraw in total from your savings account?

$-400 + (-250) = -650$ $-400 - 250 = -650$

3) A submarine is 250 meters below sea level. The submarine then rises 175 meters. What is the new position of the submarine?

$-250 + 175 = -75$

4) In Saturday's football game, the Blue team lost 3 yards on one play. They then gained 5 yards on the next. How many yards did they gain in total?

$-3 + 5 = 2$

* 5) You enter an elevator on the eighth floor. The elevator goes up 5 floors and then down 7 floors, where you exit. On what floor did you exit the elevator?

$8 + 5 - 7 = 6$

I exited on the 6th floor.

* 6) The temperature outside was 20°F. The wind chill made it feel like -15°F. Find the difference between the real temperature and the apparent temperature.

$20 - (-15) = 35$

7) Carly has $50 in a bank account. She writes a check for $75 from the account. How much money does Carly have in the account after writing the check?

8) The highest temperature ever recorded on Earth is 136°F and the lowest temperature recorded is -129°F. What is the range of temperatures on Earth?

9) The Panthers lost 6 yards on their first play and lost another 8 yards on their next play. What was their net result in yards after these two plays?

10) A submarine at -28 feet dives 40 feet. What is the submarine's position after the dive?

Read each word problem carefully, write a number sentence and solve.

9) A coin is tossed off a boat into the ocean. The coin's depth changes by -7 inches per second. Determine the depth of the coin 15 seconds after it hits the water.

$(-7)(15) = -105$

10) You have $700 in a savings account. Over a 2 month period, you make 10 withdrawals of $25 each. What is your new balance?

$(10)(-25) = -250$ $700 - (10)(25) =$

$700 - 250 = 450$

11) The temperature fell 36°F in 9 hours. If the temperature fell at the same rate every hour, what is the change in temperature each hour?

12) Evan withdrew a total of $160 from an ATM machine over a 4-day period. If he withdrew the same amount each day, how much money did Evan withdraw each day?

HOMEWORK

Read each problem carefully, write a number sentence and solve.

1) At night the average temperature on the surface of the planet Saturn is -150 degrees Celsius. During the day the temperature rises 27 degrees Celsius. What is the average temperature on the planet's surface during the day?

2) To get a first down, a football team must gain 10 yards in 4 plays. If the team gained 5 yards on the first play, lost 7 yards on the second play, and gained 8 yards on the third play. How many yards must they gain on the fourth play to get a first down?

3) A balloon rises 200 feet from the ground, drops 150 feet, and then rises 300 feet. What is the new height of the balloon?

4) A scuba diver is 85 feet below sea level. The diver rises 12 feet then descends 60 feet. How far below sea level is the diver?

5) The record low temperature for Albany, NY was -28°F. The lowest temperature in U.S. history is 52°F lower than Albany's record low. What is the lowest temperature in U.S. history?

6) During the day the moon can reach a high temperature of 265°F. At night, the temperature can reach a low of -170°F. What is the difference between the high temperature and low temperature on the moon?

7) Are the expressions x - y and y - x always opposites? Explain your reasoning.

8) Carl had $200 in his checking account. He wrote 3 checks, one for $57 and another for $103. He did not record the amount of the third check. Carl received a statement stating that he overdrew his account (meaning he took out more money than he had) by $55. What was the amount of the third check that Carl wrote?

HOMEWORK: Evaluate.

1) $-63 \div 7$ 2) $-54 \div -9$ 3) $16 \div 2$ 4) $-36 \div -6$

5) $-9 \bullet -13$ 6) $4 \bullet -23$ 7) $-5(-12)$ 8) $(-13)(7)$

9) $-3(2)(7)$ 10) $-3(4)(-7)$ 11) $(-7)(-8)(5)$ 12) $(-2)(-4)(-5)$

Read each word problem, write a number sentence and solve.

13) A shoreline is changing -3 cm each year due to erosion. What will the change in the shoreline be in 6 years?

14) The temperature during a 5-day period in Center City were $-19^{\circ}F$, $-14^{\circ}F$, $-8^{\circ}F$, $13^{\circ}F$ and $18^{\circ}F$. What was the average temperature for those 5 days?

15) The price of a stock rose \$2 yesterday. If the stock continues to change at the same rate each day, what will be the total change over 10 days?