Math 7 Homework Week 6

Draw and label a number line for 4, 5, and 6 each day this week.

Monday

1) Show work: $(-8)\,(12) =$
2) Show work: $-54 \div -9 =$
3) Which equation has a negative solution? Answer each to prove your choice.
   a. $-6 \div -2 =$
   b. $-6 + (-2) =$
   c. $-2(-6) =$
   d. $-2 - (-6) =$
4) During a football game the Miners lost 5 yards due to a penalty and then lost 6 more yards from a quarterback sack. Write and solve an expression that represents the situation.
5) Find the distance between the top of a house 55.12 feet above sea level and a coral reef 20.34 feet below sea level.
6) A hole was dug $53\frac{4}{5}$ feet underground. The construction workers then dug $61\frac{2}{3}$ further down. How deep is the hole?

Tuesday

1) Show work: $(-9) \div (-3)\,(-4) =$
2) Show work: $\dfrac{(-6)(2)(-5)}{(3)(-4)} =$
3) Savannah solves each of the following problems as shown below. Which of the answers are incorrect? Correct and explain any incorrect answers
   a. $(-6)(12) \div (-4) = 18$
   b. $8(-3) \div 6 = -4$
   c. $(-40)(-2) \div (-10) = 8$
   d. $(-7)(5)(-2) \div 5 = 14$
4) The hottest temperature ever recorded in Houston, Texas was 104 degrees. The coldest it has ever been is 30 degrees below zero. How many degrees difference is between the hottest and coldest recorded temperature?
5) Michael's bank account statement stated he had $-250.30 in his account. If Joe deposited $100 on Friday and then later took out $27.25, what is his balance in his bank account?
6) An Oregon Duck is sitting on a ledge that is $11\frac{3}{8}$ feet above the surface of a pond. The duck dives to $18\frac{5}{12}$ feet below the surface of the pond to get food. How far in feet did the duck dive?

Wednesday

1) Ella has $300 deducted from her checking account every month for her car payment. After 1 year, by how much do these payments change her checking account balance? Create an equation and solve.

2) $-2\frac{1}{4}\left(5\frac{1}{3}\right) =$

3) $-5\frac{3}{5} \div -4 =$

4) Mrs. Kuty is scuba diving again. She is swimming at 53 feet below sea level and spots a ship wreck below her. She dives down to check it out and is now at 76 feet below sea level. How far down did she swim to get to the ship wreck?

5) On Monday Sarah's checking account balance was $528.93. At the end of the week she balanced her checkbook and found that her new balance is $394.76. What was the total change in her account from the beginning of the week to the end?

6) In science class, Connor recorded $-5\frac{3}{10}$ °C as the starting temperature of a saltwater solution. To complete his experiment, he needs the temperature of the solution to increase by $\frac{4}{5}$ °C. What will Connor record as the ending temperature of the solution?

Thursday

1) A scuba diver (Mrs. Kuty, of course) descends 48 feet in 4 minutes. What is the diver's average change in position per minute relative to where she started?

2) $-4\frac{1}{5}\left(-6\frac{2}{3}\right) =$

3) $6\frac{2}{3} \div -10 =$

4) The temperature varied greatly throughout the evening. Flip's bug farm cannot survive if the temperature falls below 32°F at any time. The evening temperature was consistently 62 degrees, until a storm passed through the town. The temperature dropped 24°, dropped another 5°, rose 2°, dropped 11°, and rose 9°. What was the lowest temperature of the night? Did the bugs survive? What was the final temperature?

5) Ms. Farr received $200 for her birthday on Saturday. Later that day she bought a dress for $88.46 and shoes for 52.57. On Sunday morning her aunt gave her a late birthday present of $30. Create an equation and solve for much money Ms Farr has on Sunday.

6) A Kentucky Wildcat is jumping on a trampoline. He starts at $3\frac{3}{7}$ feet above the surface of the court and completes a slam dunk at 10 feet above the surface of the court. How far did he jump?