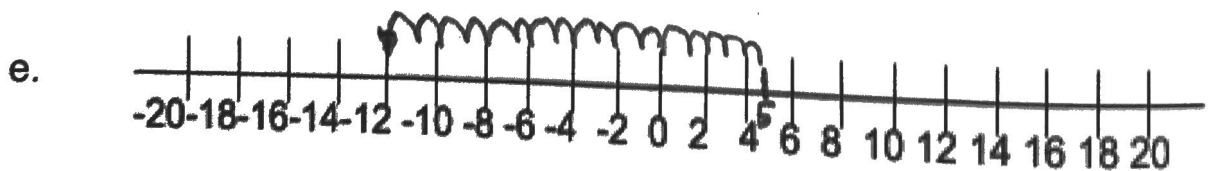
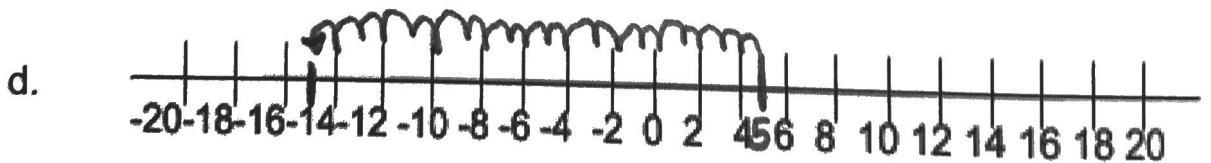
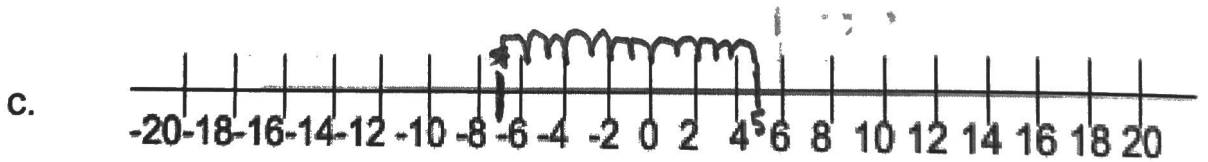
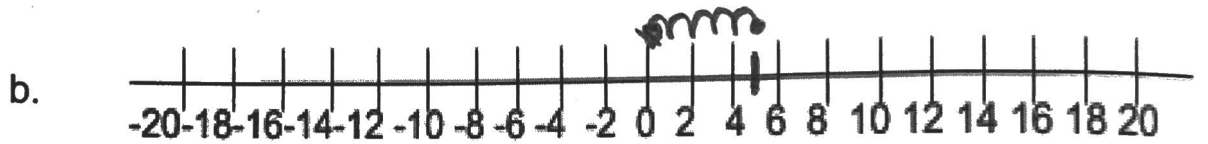
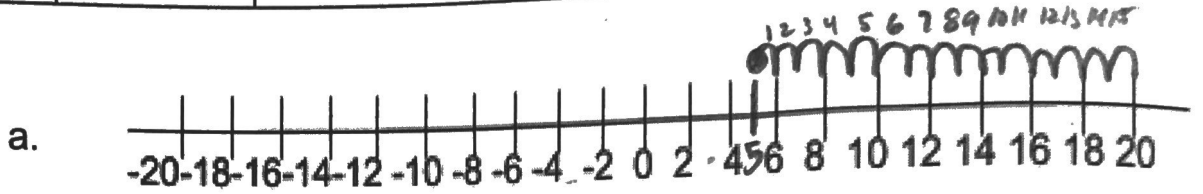


8.2 Hot or Cold

1. Complete the table and draw a number line diagram for each situation.

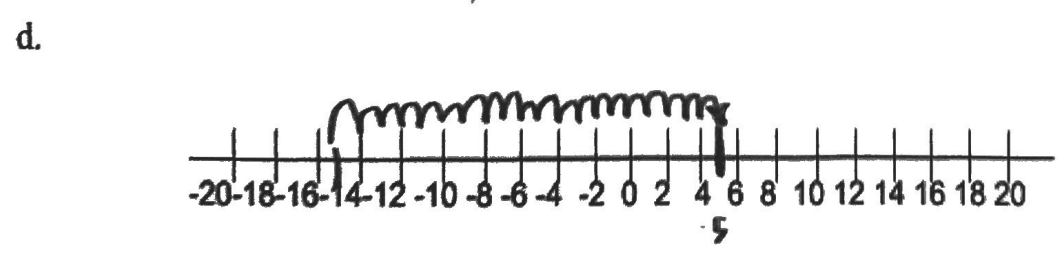
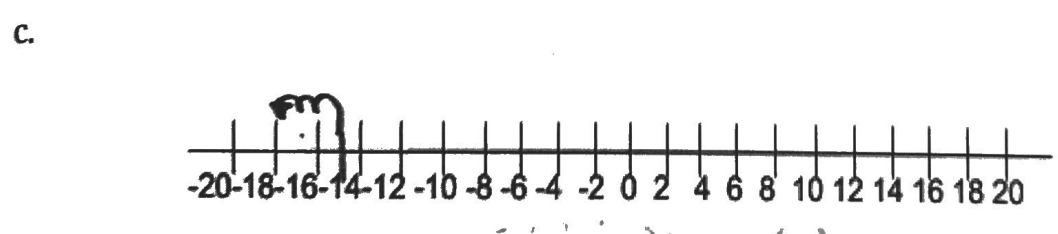
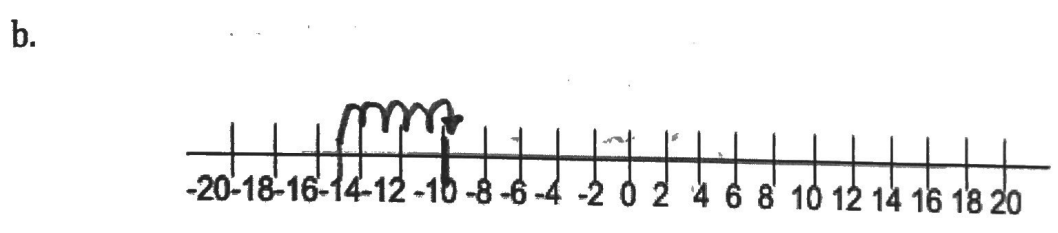
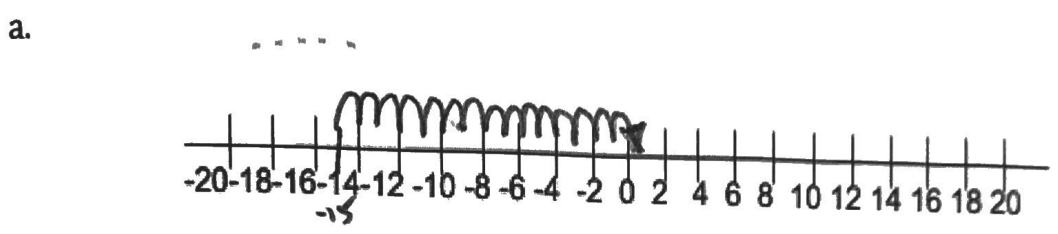
WARMER \rightarrow COLDER \leftarrow

	start	change	final	addition equation
				$5 + 15 = 20$
a	+5	15 degrees warmer	+20	
b	+5	5 degrees colder	0	$5 + (-5)$
c	+5	12 degrees colder	-7	$5 + (-12)$
d	+5	20 degrees colder	-15	$5 + (-20)$
e	+5	17 degrees colder	-12	$5 + (-17)$



2. Complete the table and draw a number line diagram for each situation.

	start	change	final	addition equation
a	-15	15 degrees warmer	0	$-15 + 15$
b	-15	5 degrees warmer	-10	$-15 + 5$
c	-15	3 degrees colder	-18	$-15 + (-3)$
d	-15	20 degrees warmer	5	$-15 + 20$



8.3 Temperatures in the Winter

One winter day, the temperature in Houston is 8 degrees Celsius. Find the temperatures in these other cities. Explain or show your reasoning.

1. In Orlando, it is 9 degrees warmer than it is in Houston.

$$8 + 9 = 17^\circ$$

2. In Salt Lake City, it is 6 degrees colder than it is in Houston.

$$8 - 6 = 2^\circ$$

3. In Minneapolis, it is 13 degrees colder than it is in Houston.

$$8 + (-13) = -5^\circ$$

4. In Fairbanks, it is 7 degrees colder than it is in Minneapolis.

$$-5 + (-7) = -12^\circ$$

5. Write an addition equation that represents the relationship between the temperature in Houston and the temperature in Fairbanks.

Colder = minus (negative)
Warmer = plus (Addition)