

**Chapter 2 Test**

1a.  $-8 > -9$

1b.  $-8 < |-8|$

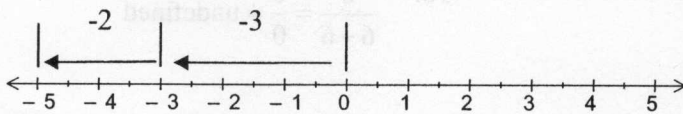
1c. the opposite of  $5 < 0$

2.  $\{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$

## 3. SCHOOL ENROLLMENTS

Monroe high school

4.



$$-3 + (-2) = -5$$

5a.  $-65 + 31 = -34$

5b.  $-17 + (-17) = -34$

5c. 
$$\begin{aligned} [6 + (-4)] + [-6 + (-4)] &= 2 + (-10) \\ &= -8 \end{aligned}$$

6a. 
$$\begin{aligned} -7 - 6 &= -7 + (-6) \\ &= -13 \end{aligned}$$

6b. 
$$\begin{aligned} -7 - (-6) &= -7 + 6 \\ &= -1 \end{aligned}$$

6c. 
$$\begin{aligned} 0 - 15 &= 0 + (-15) \\ &= -15 \end{aligned}$$

6d. 
$$\begin{aligned} -60 - 50 - 40 &= -60 + (-50) + (-40) \\ &= -150 \end{aligned}$$

7a.  $-10 \cdot 7 = -70$

7b.  $-4(-2)(-6) = 8(-6)$   
 $= -48$

7c.  $(-2)(-2)(-2)(-2) = 4(-2)(-2)$   
 $= -8(-2)$   
 $= 16$

7d.  $-55(0) = 0$

8.  $(-4)(5) = -20$

9a.  $\frac{-32}{4} = -8$

9b.  $\frac{8}{6-6} = \frac{8}{0} = \text{undefined}$

9c.  $\frac{-5}{1} = -5$

9d.  $\frac{0}{-6} = 0$

## 10. BUSINESS TAKEOVERS

Total debt =  $-6 + (-10) + (-2) = -18$

 $x$  = each businessman's debt

$6x = -18$

$\frac{6x}{6} = \frac{-18}{6}$

$x = -3$

Each businessman will incur a debt of \$3 million.

## 11. GEOGRAPHY

 $x$  = difference in elevations

$x = -282 - (-436)$

$x = -282 + 436$

$x = 154$

The difference is 154 ft.

