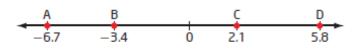**Section 7.1   Page 363   Question 5**

a) distance AC:
$|2.1 - (-6.7)| = |2.1 + 6.7|$
$= |8.8|$
$= 8.8$

b) distance BD:
$|5.8 - (-3.4)| = |5.8 + 3.4|$
$= |9.2|$
$= 9.2$

c) distance CB:
$|-3.4 - 2.1| = |-5.5|$
$= 5.5$

d) distance DA:
$|-6.7 - 5.8| = |-12.5|$
$= 12.5$

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a) $2(|-6 - (-11)|) = 2(|-6 + 11|)$
$= 2|5|$
$= 2(5)$
$= 10$

b) $|-9.5| - |12.3| = 9.5 - 12.3$
$= -2.8$

c) $3\left(\left|\dfrac{1}{2}\right|\right) + 5\left(\left|-\dfrac{3}{4}\right|\right) = 3\left(\dfrac{1}{2}\right) + 5\left(\dfrac{3}{4}\right)$
$= \dfrac{3}{2} + \dfrac{15}{4}$
$= \dfrac{6}{4} + \dfrac{15}{4}$
$= \dfrac{21}{4}$

d) $|3(-2)^2 + 5(-2) + 7| = |12 - 10 + 7|$
$= |9|$
$= 9$

e) $|-4 + 13| + |6 - (-9)| - |8 - 17| + |-2| = |9| + |15| - |-9| + 2$
$= 9 + 15 - 9 + 2$
$= 17$

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Examples:
a) $|8 - 3| = |5|$
$= 5$

b) $|12 - (-8)| = |20|$
$= 20$

c) $|2 - 9| = |-7|$
$= 7$

d) $|-7 - 15| = |-22|$
$= 22$

e) $|a - b|$

f) $|m - n|$