## Answers to Homework \#s 83-88



8-83. See below:
a. $x=1$ or $\frac{4}{3}$
b. $x=0$ or -6
c. $x=-5$ or $\frac{3}{2}$

8-84. The result must be the original expression because multiplying and factoring are opposite processes; $65 x^{2}+212 x-133$.
8-85. See below:
a. $x=3$ or $-\frac{2}{3}$
b. $x=2$ or 5
c. $x=-3$ or 2
d. $x=\frac{1}{2}$ or $-\frac{1}{2}$

8-86. See graph below:


8-87. See below:
a. true
b. false
c. true
d. true
e. false
f. false

8-88. See below:
a. -1
b. $\approx 1.6$
c. -3


8-92. See below:
a. $y=x^{2}+2 x-8$
b. $y=x^{2}-6 x+9$
c. $y=x^{2}-7 x$
d. $y=-x^{2}-4 x+5$

8-93. $m=\frac{1}{2},(0,4)$

## 8-94. See below:

a. $\approx-1.4$ and $\approx 0.3$
b. The quadratic is not factorable.

## 8-95. See below:

a. $x=4$ or -10
b. $x=-8$ or 1.5

8 -96. They are the same.
a. 4
b. -10
c. -8
d. 1.5

8-97. See below:
a. $(1,-1)$
b. $\left(-2, \frac{1}{2}\right)$

