

11-80. $FG = 3.5$ cm, $BC = 14$ cm

11-81. 18 minutes

11-82. See below:

a. Congruent ($SAS \cong$), $\triangle ABD \cong \triangle CBD$

b. Congruent ($ASA \cong$ or $AAS \cong$), $\triangle ABC \cong \triangle DEF$

11-83. See below:

a. $t(n) = -3n + 10$ or $t(n) = 7 - 3(n - 1)$

b. $t(n) = \frac{2000}{3} \cdot 3^{n-1}$ or $t(n) = \frac{2000}{9} (3)^n$

11-84. $1980 + 30m + 2590 + 20m = 5000$; $m = 8.6$; It will be full after 8 months; there will not be enough room for songs in the 9th month.

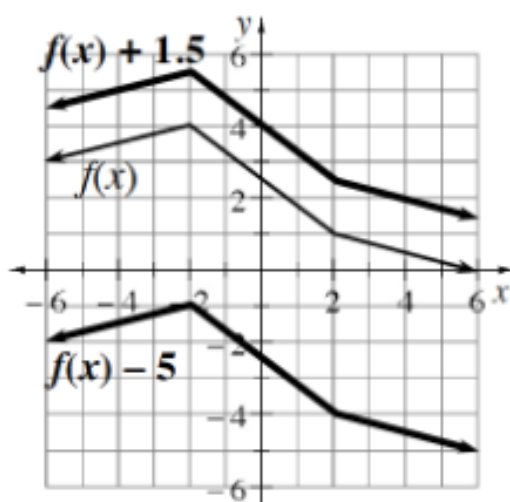
11-85. A and D

11-86. See below:

a. $y = -6 \cdot 3^x$

b. $y = 7\left(\frac{1}{2}\right)^x$

11-87. See graph below.



11-88. See below:

a. $(-1, -2)$

b. $(4, -4)$

c. $(3, 4)$