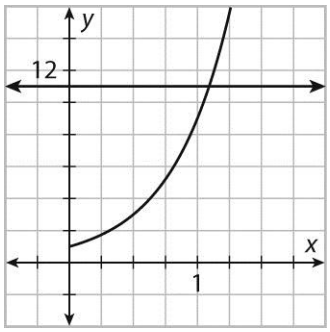
LESSON 15-1

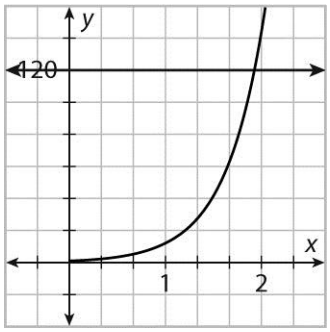
Practice and Problem Solving: A/B

1. $x = 4$
2. $x = 5$
3. $x = 4$
4. $x = 4$
5. $x = 3$
6. $x = 2$
7. $x = 2$
8. $x = 5$
9. $x = 3$
10. $f(x) = 11;\ g(x) = 9^x$;



$x \approx 1.1$

11. $f(x) = 120;\ g(x) = 12^x$;



$x \approx 1.9$

12. $600(1.05)^x = 900$; 8.3 years
13. $20{,}000(1.035)^x = 40{,}000$; 20.1 years

LESSON 15-2

Practice and Problem Solving: A/B

1. $y = 650{,}000(1.04)^t$; sales $\approx \$790{,}824.39$

   D = set of real numbers $t \geq 0$

   R = set of real numbers $y \geq 650{,}000$

2. $y = 800(1.02)^x$;

   population ≈ 901 students

   D = set of real numbers $t \geq 0$

   R = set of real numbers $y \geq 800$

3. $y = 2500(0.97)^t$;

   population ≈ 2147 people

   D = set of real numbers $t \geq 0$

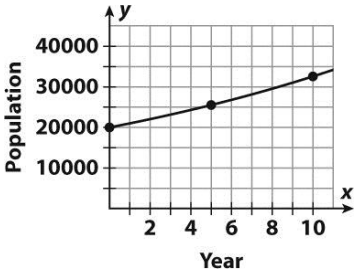
   R = set of real numbers $0 \leq y \leq 2500$

4. $y = 25{,}000(0.85)^t$; value $\approx \$6{,}812.26$

   D = set of real numbers $t \geq 0$

   R = set of real numbers $0 \leq y \leq 25{,}000$

5. $y = 20{,}000(1.05)^t$



6. $y = 45{,}000(0.8)^t$