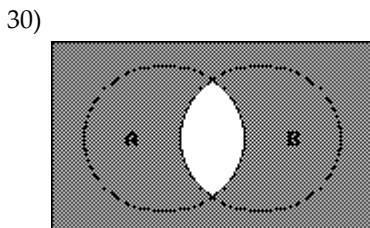
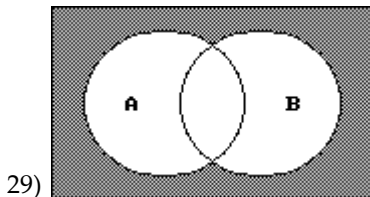


Answer Key

Testname: CHAPTER 2 REVIEW

- 1) (1, 2), (1, 5), (3,6), (3, 5), (4, 6), (4, 5), (5, 6), (5, 2)
- 2) $B = \{ 2, 3, 5, 6, 7, 8, 10\}$
- 3) $A \subseteq \{ 0, 1, 2, 3, 4, \dots\}$ b. $6 \in A$
 c. $A \cap B = \emptyset$ d. $\overline{A} \subseteq (B \cup C)$
- 4) 5
- 5) a. $\frac{1}{2}, 2, 1\frac{1}{2}, 2\frac{1}{2}$ b. $f(x) = \frac{1}{2}x$
- 6) $f(x) = 55x + 120$ b. \$670 c. 13 days
- 7) $A - B = \emptyset$
- 8) 10
- 9) 4
- 10) 30
- 11) a. 720 b. $m!$ c. 4
- 12) a. Function B. not a function 1 is paired with 1 and 2
- 13) 228
- 14) 97
- 15) \overline{A} is the set of all humans who are 45 years old or younger.
- 16) one possible answer $\{ x \mid x = 3n, 6 \leq n \leq 10, n \in \mathbb{N} \}$
- 17) A
- 18) $\{-15, -12, -9, -6, -3, 0, 3, 6, 9, 12, 15, 18, 21\}$
- 19) equal A, G, C and E, B Equivalent A, C, G F and B, E
- 20) {d}
- 21) $\{\}, \{ 1 \}, \{ 2 \}, \{ 3 \}, \{ 1, 2 \}, \{ 1,3 \}, \{ 2, 3 \}$
- 22) { f,i,t,o,l,d }
- 23) { f,i }
- 24) { f,i,t,o,l,d }
- 25) { f,i }
- 26) 3
- 27) { f,i,t,o,l,d }
- 28) 5



Answer Key

Testname: CHAPTER 2 REVIEW

31) a. 7 b. 49

32) $\overline{A \cap B}$

33) 21

34) Well defined

35) 16

36) Function

37) 97

38) (6, 330), (9, 495), (14, 770)

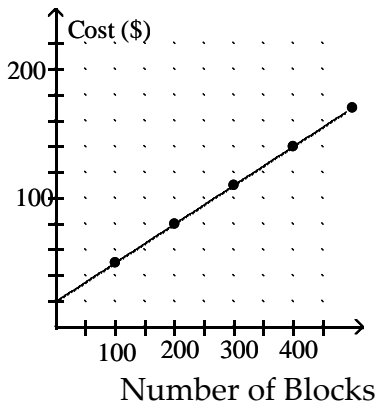
39) 131

40) Domain: $\{2, 4, 5, 8\}$; range: $\{1, 2\}$

41) The worker assembles lamps at a constant rate for the first 2 hours, then stops for 30 minutes, probably for a midmorning break. When the break ends, the worker resumes work at the same constant rate for $1\frac{1}{2}$ hours, then stops for an hour, probably for lunch. The worker has

assembled 70 chairs during the morning.

42) $C(x) = 20 + 0.3x$



The cost of producing a set of 350 blocks is \$125.

43) a. 7 b. $2x + 5$

44) 12

45) Equivalent

46) a. 440 b. \$552 c. 50 hours

47) Commutative

48) Commutative

49) Associative

50)

51) $x + 52 = 75$

52) For the whole number 3 there exists a natural number k such that $3 + k = 9$, where $k = 6$.