

198 30, 32, 34, 36, 40, 42

30. $U = \{0, 1, 2, 3, 4, 5, 6\}$

$A = \{2, 4, 6\}$

$B = \{1, 2, 3\}$

$A \subseteq U$ True everything
in A is in B

40. $-2(3x+7) > -14$
 $-6x - 14 > -14$
 $-6x - 14 + 14 > -14 + 14$
 $-6x > 0$
 $\frac{-6x}{-6} > \frac{0}{-6}$

$x < 0$

$\{x \mid x < 0\}$

32. $B \subseteq A$

$B = \{1, 2, 3\}$ $A = \{2, 4, 6\}$

ATP

$B \subseteq A$ True some
elements in B are
not in A
1, 3

42. $-2(3x+7) \geq -14 - 6x$
 $-6x - 14 \geq -14 - 6x$
 $-14 - 6x \geq -14 - 6x$
all real
numbers

$\{x \mid x \text{ is a real number}\}$

34. $B = \{11, 12, 13, 14, \dots\}$

$B = \{b \mid b \text{ is an integer, } b \geq 11\}$

36. $U = \{1, 2, 3, 4, 6, 12\}$

$S = \{x \mid x \text{ is a factor of } 12\}$