

## SM2H 3.5 – Solving by Factoring Key

1.  $x = 3$  or  $x = 6$
2.  $x = 0$  or  $x = 1$
3.  $x = -2$  or  $x = -1$
4.  $x = 0$
5.  $x = 7$  or  $x = -2/7$
6.  $x = -3/7$  or  $x = -1/8$
7.  $x = 7$  or  $x = -5$
8.  $x = 2$  or  $x = 4$
9.  $x = 0$  or  $x = -7$
10.  $x = -3$  or  $x = 3$
11.  $x = -7$  or  $x = 1$
12.  $x = 0$  or  $x = -5/7$
13.  $x = 2$  or  $x = 6/5$
14.  $x = -3/4$  or  $x = 3/4$
15.  $x = -2/3$
16. If several factors are multiplied together to equal zero, at least one of them has to be equal to zero.
17.  $-6$  &  $-5$ ,  $5$  &  $6$
18.  $-12$  &  $-11$ ,  $11$  &  $12$
19.  $-9$  &  $-7$ ,  $7$  &  $9$
20.  $-18$  &  $-16$ ,  $16$  &  $18$
21.  $-12$  &  $-14$ ,  $7$  &  $24$
22.  $9$  &  $16$ ,  $-8$  &  $-18$
23.  $15$  in X  $24$  in
24.  $5$ ft X  $7$ ft
25.  $x = -2, 2, 3$
26.  $x = 0, -2, \frac{4}{5}$
27.  $f(x) = (x - 4)(x - 7)(x + 2)$
28.  $f(x) = (x - 5)(x - 4)(x + 8)(x + 6)$
29.  $f(x) = x^2 + x - 6$
30.  $f(x) = x^2 + 12x + 35$