## SM2 7.1 odd answers

1. Form: vertex

Vertex: $(4,3)$
Axis of Symmetry: $x=4$ Direction of opening: up y-intercept: $(0,19)$
3. Form: standard

Vertex: $(1,-12)$
Axis of Symmetry: $x=1$
Direction of opening: up
y-intercept: $(0,-11)$
5. Form: factored

Vertex: $(5,-4)$
Axis of Symmetry: $x=5$
Direction of opening: up y-intercept: $(0,21)$
7. Vertex: $(2,-5)$

Axis of Symmetry: $x=2$
$y$-intercept: $(0,-1)$
positive
9. Vertex: $(-1,2)$

Axis of Symmetry: $x=-1$
y-intercept: $\left(0,1 \frac{1}{2}\right)$
negative
11. $x=-3$, and $x=\frac{5}{2}$
13. $\frac{3 \pm \sqrt{185}}{8}$

