

## SOL Mini-Challenge

## Expressions and Operations A.14

### Read and solve.

1. The stress distribution on a structure is given by  $s = 2x^2 + 4x - 30$  where  $s$  is stress in pounds per square inch and  $x$  is the distance in feet from a reference point. At what distance is the stress equal to 0?

- A. 3 ft
- B. 5 ft
- C. 6 ft
- D. 12 ft

2. Which is a solution to  $(2x + 3)^2 = 25$  ?

- F. -4
- G. -2
- H. -1
- J. 2

3. Which is a solution of  $6y^2 - 3y - 9 = 0$  ?

- F.  $\frac{2}{3}$
- G. 1
- H. -1
- J. 2

4. Which is a solution of  $x^2 + 7x + 6 = 0$ ?

- A. -6
- B. -3
- C. 1
- D. 2

5. Which is a solution of  $x^2 - 81 = 0$ ?

- F. -3
- G. 9
- H. 27
- J. 81