Situation Cards Key

Note: Students may represent a variable with any letter.

- 7.50h = p where h = hours worked and p = payment.
 7.50 x 4 = \$30 for 4 hours.
 7.50 x 5.5 = \$41.25 for 5.5 hours.
- 2. 4p + 12 = 32 where p = price of tickets.
 p = \$5 per ticket.
 5 x 2 = \$10 per couple.
- 3. This answer will vary based on class size. The following uses a class size of 28.
 .5s = 12.50 where s = number of students.
 28 x .5 = 12.50

Students should reason that since half of 28 is 14, they would be \$2.50 short and therefore unable to buy each child a candy bar.

4. 8p + p = 50 OR 9p = 50 OR 8p + 1p = 50 where p = price of ticket.

For 6 siblings, you would spend \$54, which is \$4 too expensive.

For 5 siblings, you will spend \$48, which leaves \$4 left over.

Angie can take 4 siblings with you, or let her 5 siblings go to the movie while she stays home. Even better, her dad may give her an extra \$4!

- 5. 30 + 2h = t where h = hours and t = temperature. 30 + 2h = 55. h = 12.5 hours
- 6. 84b = 180 where b = number of busses.
 180/84 = 2.14 busses, so you will need 3 busses for the field trip.
 180/3 busses = 60 people on each bus.
- 7. p = payment earned and m = miles walkedAshley's plan p = 10.For 8 miles, p = \$10.Caroline's plan p = 3m.For 8 miles, p = \$24.Donnie's plan p = 5 + 1m.For 8 miles, p = \$13.Caroline's plan will bring in the most money.T-shirt equation using Caroline's plan: p = 3m 5.

8. c = cost and h = hours worked.

c = 75h.	For 2.5 hours, c = \$187.50.
c = 100 + 20h	For 2.5 hours, c = \$150.00.
c = 150 + 30h	For 2.5 hours, c = \$225.00.

Emily's mom should hire Dante Fantasio for \$150.00.

9. Plan A: 250 = 10.50w where w = weeks.

Plan B: 250 = 120 + 5x.

After 12 weeks, Natalie will have paid \$126 on plan A and \$180 on plan B, which means she still owes \$124 on plan A and \$70 on plan B.

After working the two-step equation, it will take 23.8 (or about 24) weeks to pay off plan A and 26 weeks to pay off plan B. Plan A takes the least amount of weeks to pay off.