

11-104. A relative frequency table is below. There is almost no difference between the amount of cheese at Taco Shack and at the competitor. Any difference can easily be explained by natural sample-to-sample variability. No association. The Taco Shack owner does not need to adjust the amount of cheese, and should consider other reasons for the difference in perception.

NUMBER OF TACOS	Taco Shack	competitor
<15 grams cheese	11%	10%
between 15g and 25g cheese	60%	61%
>25 grams cheese	29%	29%

11-105. 1.61 hours or 96.77 minutes

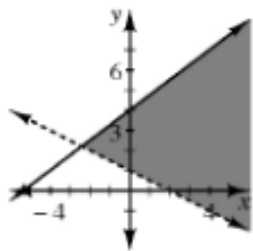
11-106. Both (a) and (d) are equivalent. One way to test is to check that the solution to $4(3x - 1) + 3x = 9x + 5$ makes the equation true (the solution is $\frac{3}{2}$).

11-107. See below:

a. $t(n) = \frac{1}{2} \left(\frac{1}{2}\right)^{n-1}$

b. $t(n) = -7.5 - 2(n - 1)$

11-108. See graph below.



11-109. See below:

a. 3

b. 2

c. 1

d. 0

e. 1

f. does not exist

g. 2

11-110. See below:

a. $x > 3$ or $x < -3$

b. $0 \leq x \leq \frac{4}{3}$

c. $x = -2$ or 3

d. $x = 3$

11-111. $u = 4, v = -3$

11-112. See below:

a. $\frac{9x^2}{y^4}$

b. $\frac{2x^2}{y}$

c. $\frac{x}{2}$