

# Course Review Assignment Key

1. a)  $c = 4.14$      $b = 6.73$      $\angle C = 38^\circ$   
b)  $e = 20.00$      $\angle D = 53.13^\circ$      $\angle F = 36.87^\circ$

2.  ~~$x = 139.39 \text{ m}$~~      $x = 128.67 \text{ m}$

3. a)  $a = 12.7$      $\angle C = 32^\circ$      $\angle A = 58^\circ$   
b)  $\angle C = 30^\circ$      $b = 15.0$      $c = 7.5$

4.  $h = 1.4 \text{ m}$

5.  $l = 298.2 \text{ m}$

6.  $\Theta = 38.9^\circ$

7. a)  $\frac{1}{x^6}$     b)  $b^{1/12}$     c)  $x^{5/2}$

d)  $x^6$

8. a) 13    b)  $14x$

9. a)  $\frac{-21b}{x^{18}}$     b)  $\frac{1b}{25}$

10. a)  $x^2 + 6x + 8$

b)  $y^2 - 64$

c)  $8a^2 + 2ab - 21b^2$

d)  $25x^2 + 30xy + 9y^2$

11. a)  $4mn(m^4 - 3n^2)$

b)  $(y+x)(y+2)$

c)  $(x-3)(x+9)$

d)  $(x-7)(2x-1)$

e)  $(3x-5y)(3x+5y)$

f)  $(2x+3)^2$