

### Answers to APPC Unit 3 Wkst A

1. 3
2. 0
3. -2
4. 0
5. 3
6. 12
7. undefined
8. -2 hint: use the property that  $(f \circ g)^{-1}(x) = g^{-1} \circ f^{-1}(x)$
9.  $\frac{3}{4}$
10. 4
11.  $f^{-1}(5) = 0, f^{-1}(5) = 8, \text{ and } f^{-1}(5) = -1$
12.  $g^{-1}(2) = -3, g^{-1}(2) = -2, \text{ and } g^{-1}(2) = 2$
13.  $h^{-1}(6) = -3, h^{-1}(6) = \frac{1+\sqrt{13}}{2}, \text{ and } h^{-1}(6) = \frac{1-\sqrt{13}}{2}$
14.  $j^{-1}(9) = 2$
15.  $k^{-1}(-8) = -1, k^{-1}(-8) = -\frac{\sqrt{14}}{2}, k^{-1}(-8) = 1, \text{ and } k^{-1}(-8) = \frac{\sqrt{14}}{2}$