9.5 Classwork: Rounding and functions

1. Do Now: Which expressions are equivalent to $3\sqrt{5} + \sqrt{5}$?

$$\Box \sqrt{5} + \sqrt{5} + \sqrt{5} + \sqrt{5}$$

$$\Box \sqrt{8} + \sqrt{5}$$

$$\Box 3\sqrt{10}$$

$$\Box (3+1)\sqrt{5}$$

$$\Box \sqrt{3}\sqrt{5}$$

Function substitution

2. (a) Given f(x) = 4x + 7. Simplify f(2). (c) Given $h(x) = x^2 - 4x + 1$. Simplify h(0).

- (b) Given $g(x) = \frac{3}{2}x 5$. Simplify g(4).
- (d) Given j(x) = x 11. Find x such that j(x) = 5.

Rounding

- 3. (a) Round to the nearest hundredth 15.944732
- (d) Round to the *nearest tenth* $\alpha = \frac{3}{2}\pi$
- (b) Round to the nearest thousandth $\sqrt{2}$
- (e) Round to three significant figures 19.49711
- (c) Round to the nearest hundredth $\theta = \frac{\pi}{3}$
- (f) Round to three significant figures 6.56501