

**1-4HW-Precision+exponents**

1. For each of the following, round to the given precision:

(a) Tenths,  $85.44580 \approx$

(b) Hundredths,  $219.4951280 \approx$

(c) Thousands,  $412,725.4 \approx$

2. Write down the number of significant figures of each value:

(a) 3.14159

(b) 5.40

(c) 96,100

3. Round each value to three significant figures:

(a)  $289.457 \approx$

(b)  $7.142856 \dots \approx$

(c)  $21,060 \approx$

(d)  $1.0095867 \approx$

(e)  $\pi \approx$

(f)  $e \approx$

Simplify

4.  $(x + 5)(3x - 2)$

5.  $(x - 1)(x + 2)(x - 3)$

6.  $x^3 \times x^{-2}y^2$

7.  $x^3 \div x^5y$

8.  $\sqrt[3]{x^6y^3z^6}$

The formula for simple interest is  $P(t) = P_0(1 + rt)$ .

9. What is the value of \$200 in principal at a rate of 5% per annum after one-half year?  
( $P_0 = 200$ ,  $r = 0.05$ ,  $t = 0.5$ )

10. What is the value of \$220 in principal at a rate of 5.5% per annum after nine months?