

Name:

1.4 Homework: Precision and exponent practice

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?