

Section 1.1 Focus Exercise Answers

1. a) 12 b) 0 c) 9 d) $\frac{3}{5}$ e) 2.5 f) $\sqrt{10}$
2. a) $\frac{3}{10}$ b) $\frac{75}{10} = \frac{15}{2}$ or $7\frac{1}{2}$ c) $-\frac{105}{1000} = -\frac{21}{200}$
3. a) $\frac{8}{9}$ b) $\frac{45}{99} = \frac{5}{11}$ c) $\frac{216}{999} = \frac{8}{37}$
- d) $\frac{72}{99} = \frac{8}{11}$ e) $\frac{6}{99} = \frac{2}{33}$ f) $\frac{540}{999} = \frac{20}{37}$
4. a) Rational; the numerator and denominator are integers.
 b) Rational; the numerator and denominator are integers.
 c) Rational; the number is a repeating decimal.
 d) Not rational; the decimal does not terminate and does not repeat.
 e) Rational; the decimal terminates.

5.		Natural	Whole	Integer	Rational	Irrational	Undefined	Real
a)	- 5			✓	✓			✓
b)	8.2395071...					✓		✓
c)	$-\frac{6}{7}$				✓			✓
d)	π					✓		✓
e)	$\frac{2}{0}$						✓	✓
f)	$3.\overline{14}$				✓			✓
g)	$\frac{9}{3}$	✓	✓	✓	✓			✓
h)	$\sqrt{6}$					✓		✓
i)	$\frac{0}{3}$		✓	✓	✓			✓
j)	$-\sqrt{25}$			✓	✓			✓