

Geometry

Section 7-1

Selected Answers.

8.) pet owners : households

$$460 : 1000$$

Simplify

$$46 : 100$$

$$\boxed{23 : 50}$$

order is essential

10.) Students : faculty

$$\boxed{27 : 1}$$

12.) Δ 8:7:5 $P = 240$ ft.

$$8x + 7x + 5x = 240$$

$$20x = 240$$

$$x = 12$$

$$8x = 8(12) = 96 \text{ ft}$$

$$7x = 7(12) = 84 \text{ ft}$$

$$5x = 5(12) = 60 \text{ ft}$$

The measures of the 3 sides of the Δ are 96 ft, 84 ft, 60 ft.

18.) $x = 1\frac{7}{8}$

20.) $x = 3$

22.) $x = -1\frac{1}{2}$

24.) $x = -11$

14.) The measures of the 3 sides of the Δ are 10.5 in, 14 in, 7 in.

16.) angles of Δ

$$2:5:3$$

angle sum theorem

$$2x + 5x + 3x = 180$$

$$10x = 180$$

$$x = 18$$

$$2(x) = 2(18) = 36^\circ$$

$$5x = 5(18) = 90^\circ$$

$$3x = 3(18) = 54^\circ$$

The angles of the Δ measure 36° , 90° , 54°