1.

Animal	Pet Store A	Pet Store B
cats	15	(11)
dogs	(12)	16
birds	13	14

a. What is the ratio of cats at Pet Store B compared to dogs at Pet Store A?

$$11:12 \quad \text{or} \quad 11 \text{ to } 12 \quad \text{or} \quad \frac{11}{12}$$

b. What is the ratio of animals at Pet Store A to animals at Pet Store B?

$$\frac{15+12+13}{11+16+14} = \frac{40}{41} \quad \text{or} \quad 40:41 \quad \text{or} \quad 40 \text{ to } 41$$

3. A bakery sells 30 cookies for $48. How much will 12 cookies cost?

$$
\begin{array}{r}
19.2 \\
30\overline{)576} \\
\underline{30} \\
276 \\
\underline{270} \\
60 \\
\underline{60} \\
0
\end{array}
\qquad
\begin{array}{r}
48 \\
\times 12 \\
\hline
96 \\
480 \\
\hline
576
\end{array}
$$

$$\frac{30}{\$48} = \frac{12}{x} \qquad 30x = 576 \rightarrow \quad x = \$19.20$$
$$\frac{30x}{30} = \frac{576}{30}$$

4. Shlomo drives 260 miles in 4 hours. What is his rate (speed)?

$$
\begin{array}{r}
65 \\
4\overline{)260} \\
\underline{24} \\
20
\end{array}
$$

$$\frac{260 \text{ miles}}{4 \text{ hrs}} = 65 \text{ miles/hr}$$

5. a) Is the expression $\frac{10}{16} = \frac{x}{56}$ a ratio, rate or (proportion)?

b) Solve: $\frac{10}{16} = \frac{x}{56}$

$$
\begin{array}{r}
35 \\
16\overline{)560} \\
\underline{48} \\
80
\end{array}
$$

$$\frac{560}{16} = \frac{16x}{16} \rightarrow \quad x = 35$$