## Unit 2, Lesson 12: Using Graphs to Compare Relationships

1. Match each equation to its graph.
A. $y=2 x$
B. $y=\frac{4}{5} x$
C. $y=\frac{1}{4} x$
D. $y=\frac{2}{3} x$

1


4
E. $y=\frac{4}{3} x$
F. $y=\frac{3}{2} x$


2


5


3


6

2. The graphs below show some data from a coffee shop menu. One of the graphs shows cost (in dollars) vs. drink volume (in ounces), and one of the graphs shows calories vs. drink volume (in ounces).
$\qquad$ vs volume

$\qquad$ vs volume

a. Which graph is which? Give them the correct titles.
b. Which quantities appear to be in a proportional relationship? Explain how you know.
c. For the proportional relationship, find the constant of proportionality. What does that number mean?
3. Lin and Andre biked home from school at a steady pace. Lin biked 1.5 km and it took her 5 minutes. Andre biked 2 km and it took him 8 minutes.
a. Draw a graph with two lines that represent the bike rides of Lin and Andre.
b. For each line, highlight the point with coordinates $(1, k)$ and find $k$.
c. Who was biking faster?

