

Chapter 7 Review

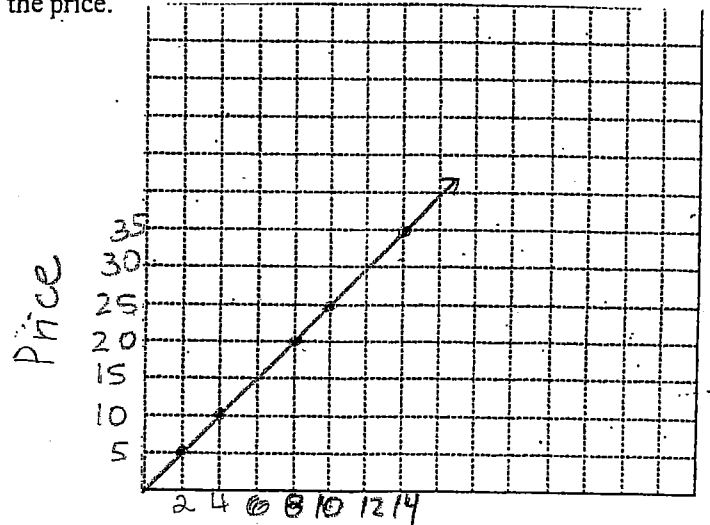
Eva $\frac{\$4.00}{500} = \frac{72}{9000}$
 $\frac{\$75}{1 \text{ week}} = \frac{72}{1 \text{ week}}$

Annie $\frac{9000}{1 \text{ week}} = \frac{72.00}{1 \text{ week}}$

Name _____

- 1. Eva is saving money for a trip. She is able to save \$75 a week. Her friend from Iceland, Annie, is also saving money. Annie is able to save 9000 Kronas (Icelandic money) each week. If \$4 is equal to about 500 Kronas, who is saving at a greater rate? *Eva is saving at faster rate, Eva saves \$75 per week as Annie saves \$72 per week*
- 3. Mel's Grocery is selling three cans of soup for \$5. Use this information to complete the table below. Then graph the relationship between the number of cans you could buy and the price.

Cans	Price (in dollars)
0	0
2	5
4	10
8	20
10	25
14	35



- 4. Without a calculator, find the following quotients. Use any of the strategies ... diagram, super giant one, common denominator, multiply by the reciprocal (inverse), change to decimal and then use long division.

$\frac{3}{7} \div \frac{2}{3}$

$\frac{3}{7} \cdot \frac{3}{2} = \frac{9}{14}$

a. $1.2 \div 0.04$

$\frac{12}{10} \div \frac{4}{100}$

$\frac{12}{10} \div \frac{4}{100}$

$\frac{12}{10} \cdot \frac{100}{4}$

$\frac{1200}{40}$

$= 30$

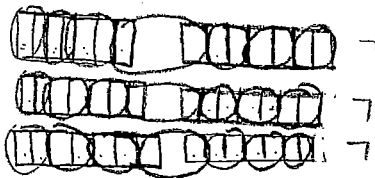
b. $8\frac{2}{3} \div 4\frac{1}{2}$

$\frac{26}{3} \div \frac{9}{2}$

$\frac{26}{3} \cdot \frac{2}{9} = \frac{52}{27}$

$= 1\frac{25}{27}$

- 5. Maureen and Michael want to make cupcakes for their teachers. They have 6 tubes of frosting, and each cupcake requires $\frac{2}{7}$ of a tube of frosting. How many cupcakes can they make? Show how you know.



21 cupcake

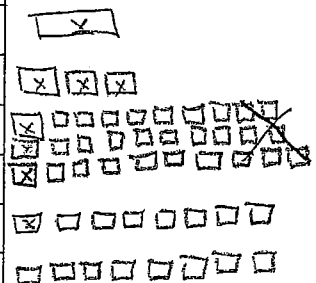
$6 \div \frac{2}{7}$

$\frac{6}{1} \cdot \frac{7}{2} = \frac{42}{2} = 21$

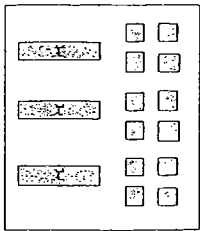
- 6. Complete two trials by reading the algebraic expressions. Write in the steps as well.

Steps	Trial 1	Trial 2	Algebraic Expression
Pick a number			x
Multiply by 3			$3x$
Add 27			$3x+27$
Subtract 6			$3x+21$
\div by 3			$x+7$
Subtract original x			7

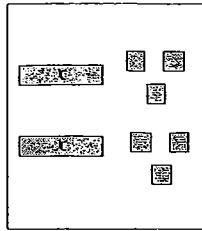
Draw tiles



7. When algebra tiles are grouped in sets, as shown below, they can be written in two different ways. Write two equivalent expressions that represent these collections of algebra tiles.



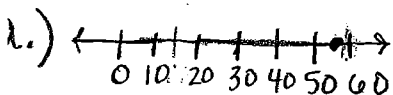
$3(x+4)$
 $3x+12$



$2(x+3)$
 $2x+6$

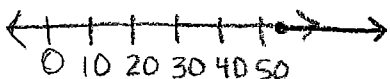
8. To solve for a variable means to determine all of the possible values for the variable that make the equation or inequality true. Solve each of the following equations and inequalities and show the solutions on a number line.

- a. $x - 10 = 46$
 $+10 = +10$
 $x = 56$
- b. $c - 24 \geq 30$
- c. $w + 8 < 28$
- d. $20 = e + 9$
- e. $\frac{y}{4} = 15$

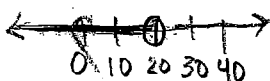


2.) $c - 24 \geq 30$
 $+24 \quad +24$

$c \geq 54$



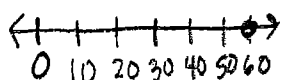
3.) $w + 8 < 28$



4.) $20 = e + 9$
 $-9 \quad -9$

$11 = e$

5.) $\frac{y}{4} = 15 \cdot 4$
 $y = 60$



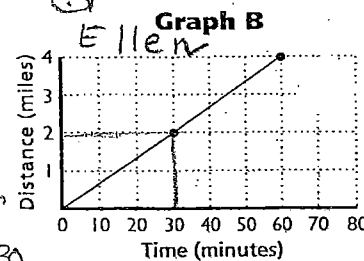
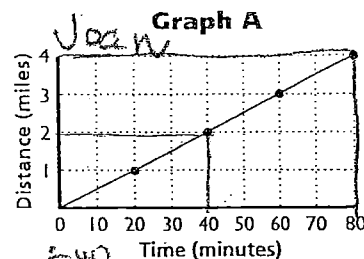
Which Graph? (E)

Ellen and Joan left school and rode their bikes to the library. One graph represents Ellen's bike ride. The other graph represents Joan's ride.

Study the graphs and answer these questions.

- 1 Ellen averaged 2 miles in 30 minutes. Which graph shows her ride? Graph B
- 2 Who rode faster, Ellen or Joan? Ellen
- 3 Joan left school at 4:30 P.M. What time did she get to the library? 5:50
- 4 How can you tell from the graphs who rode faster? Ellen's graph shows a steeper line than Joan's meaning she rode faster.

$80 \text{ min} = 1 \text{ hr } 20 \text{ min}$



$\frac{2}{30} = \frac{1}{15}$
 $\frac{4}{60} = \frac{1}{15}$

Which Graph? (F)

Willie and Jean left the library at the same time and rode their bikes to the swimming pool. One graph represents Willie's bike ride, and the other represents Jean's ride.

Study the graphs and answer these questions.

- 1 On the way to the pool, Willie stopped for 10 minutes to put air in his bike tires. Jean did not stop. Which graph shows Willie's trip? Graph A
- 2 How does the graph show that Willie stopped?
The horizontal part of the graph between 10 & 20 mins shows the stop
- 3 Who got to the pool first?
Willie
- 4 How far is it from the library to the swimming pool?

