Grade 6, Term 1 Revision Sheets

Chapter 1: "Ratios and Rates"

Lesson 1: Factors and Multiples

Find the GCF of each set of numbers.

a. 10, 45

b. 9, 36

c. 12, 20

d. 24, 64

e. 39, 26

f. 35, 63

g. 36, 48

h. 35, 28

Find the LCM of each set of numbers.

a. 70, 10

b. 7, 49

c. 5, 10

d. 12, 18

e. 8, 28

f. 6, 14

g. 12, 15

h. 9, 24

Lesson 2: Ratios

Write each ratio as a fraction in simplest form.

1. 3 sailboats to 4 fan boats

2. 9 tulips to 16 daffodils

3. 8 ducks to 13 geese

4. 6 baseballs to 9 softballs

5. 6 poodles to 18 beagles

6. 10 brown eggs to 12 white eggs

Problem solving

- The design on Mona's wall includes 16 pink stripes and 20 green stripes. Find the ratio of pink stripes to green stripes.

- At a wildlife park, Huda counted 10 lions and 14 tigers. What is the ratio of lions to tigers?

For Exercises 1 and 2, refer to the table showing tide pool animals. Write each ratio in simplest form.

1. Find the ratio of limpets to snails. Then explain its meaning.

Animals Found in a Tide Pool	
Animal	**Number**
Anemones	16
Limpets	22
Snails	12
Starfish	3

2. Find the ratio of snails to the total number of animals. Then explain its meaning.

Lesson 3: Rates

Write each of the following rates as a unit rate.

1. 14 hours in 2 weeks

2. 36 pieces of candy for 6 children

3. 8 teaspoons for 4 cups

4. 8 tomatoes for AED 2

5. AED 28 for 4 hours

6. 150 miles in 3 hours

7. AED 18 for 3 CDs

8. 48 logs on 6 trucks

9. Write the ratio AED 12 dollars for 3 tickets as a unit rate.

Problem Solving:

- Mohamed raked 30 bags of leaves in 3 hours. If he raked the same number of bags each hour, how many bags of leaves did he rake in one hour?

- Mr. Ahmed gives his math students 34 quizzes during 17 weeks of school. If he gave the same number of quizzes each week, how many quizzes does Mr. Ahmed give his students every week?

- It cost Mrs. Nayla AED 245 for her and 6 people to take a day-long guided tour of the Al-Ain Zoo. How much does the guided tour cost per person?

Lesson 4: Ratio Tables

Use the ratio table given to solve each problem.

1. A recipe for 1 apple pie calls for 6 cups of sliced apples. How many cups of sliced apples are needed to make 4 apple pies?

Number of Pies	1			4
Cups of Sliced Apples	6			

2. **B** Jassim bought 40 packs of baseball cards for a discounted price of AED 64. If he sells 10 packs of baseball cards to a friend at cost, how much should he charge?

Number of Baseball Card Packs	10			40
Cost in Dollars				64

3. A recipe that yields 12 cups of soup calls for 28 ounces of beef broth. How many ounces of beef broth do you need to make 18 cups of the soup?

Number of Cups		12	18
Ounces of Beef Broth		28	

4. At a cat shelter, a 24-pound bag of cat food will feed 36 cats a day. How many cats would you expect to feed with a 16-pound bag of cat food?

Pounds of Cat Food	16	24	
Number of Cats Fed		36	

5. Mr. Fahd economy car can travel 420 miles on a 12-gallon tank of gas. Determine how many miles he can travel on 8 gallons.

Miles	420		
Gallons	12		8

Lesson 5: Graph Ratio Tables

Graph and label each point on the coordinate plane at the right.

a. $N\,(8, 6)$

b. $P\,(0, 8)$

c. $R\,(4, 8)$

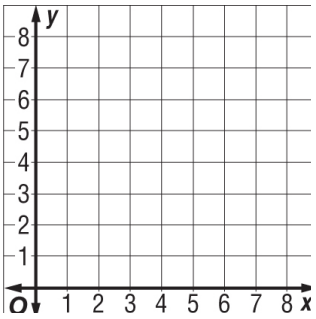
d. $S\,(3, 4)$

e. $T\,(6, 8)$

f. $W\,(6, 2)$

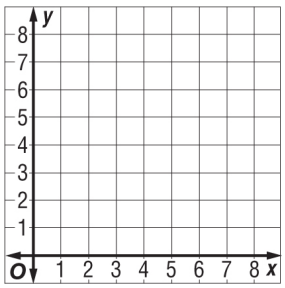
g. $A\,(8, 2)$

h. $B\,(2, 7)$

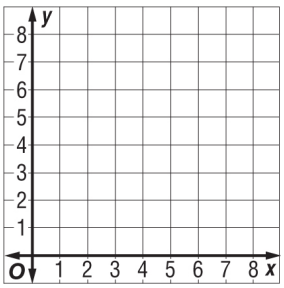


Graph and label each point on the coordinate plane.

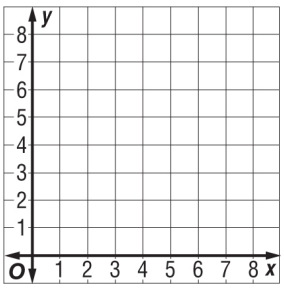
1. $A(2, 7)$



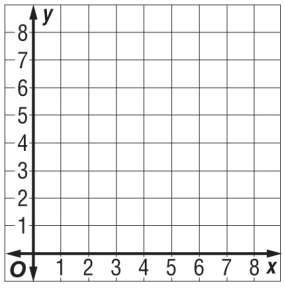
2. $B(1, 5)$



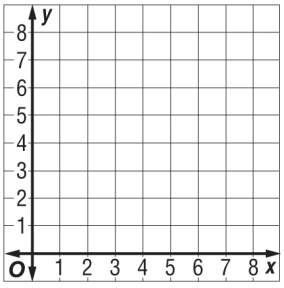
3. $C(4, 7)$



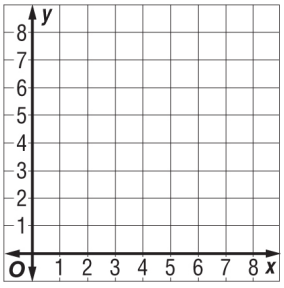
4. $D(2, 5)$



5. $E(6, 4)$



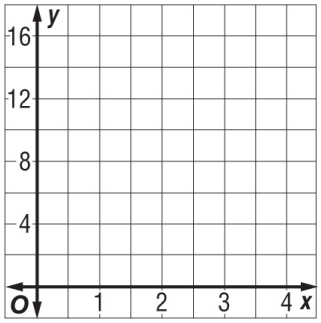
6. $F(0, 6)$



A) Use the following information.

A car wash can wash four cars in one hour. The table shows the total number of cars washed in 0, 1, 2, and 3 hours.

Hours	0	1	2	3
Cars Washed	0	4	8	12



a. List this information as ordered pairs (number of hours, number of cars washed).

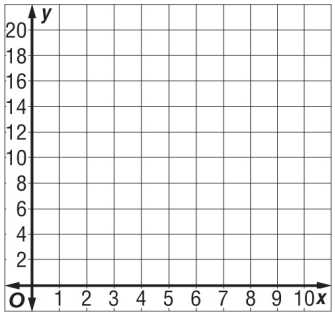
b. Graph the ordered pairs on the coordinate plane at the right. Then describe the graph

B) Erasers cost 5 cents each at the school store. The table shows this relationship.

Cost of Erasers	
Number of Erasers	**Cost (AED)**
1	5
2	10
3	15
4	20

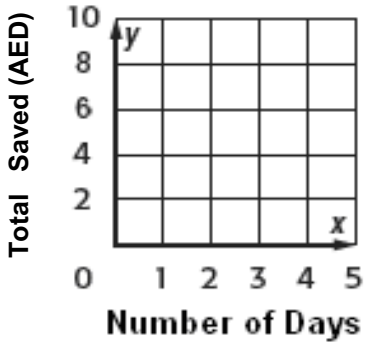
a. List this information as ordered pairs (number of erasers, cost).

b. Graph the ordered pairs. Then describe the graph.



C) Fatima is saving AED1.50 each day to buy a new sweater. The table shows the amount that Fatima saves each day to buy a new sweater. The table also lists this information as ordered pairs (days, total saved).

1. Graph the ordered pairs.



Tanya's Savings		
Number of Days, *x*	**Total Saved (AED), *y***	**Ordered Pair (*x*, *y*)**
0	0	(0, 0)
1	1.5	(1, 1.5)
2	3	(2, 3)
3	4.5	(3, 4.5)
4	6	(4, 6)

2. Describe the pattern in the graph.

Lesson 6: Equivalent Ratios

Determine if each pair of ratios or rates are equivalent. Explain your reasoning.

1. AED 18 for 3 bracelets; AED 30 for 5 bracelets

2. 120 Calories in 2 servings; 360 Calories in 6 servings

3. 4 hours worked for AED 12; 7 hours worked for AED 28

4. 15 blank CDs for AED 5; 45 blank CDs for AED 15

5. 24 points scored in 4 games; 48 points scored in 10 games

6. 15 out of 20 students own hand-held games; 105 out of 160 students own hand-held games.

7. 30 minutes to jog 3 miles; 50 minutes to jog 5 miles

8. AED 3 for 6 muffins; AED 9 for 18 muffins

9. 360 miles driven on 12 gallons of fuel; 270 miles driven on 9 gallons of fuel

10. Fahad bought 2 pairs of jeans for AED 50, and Jassim bought 4 pairs of jeans for AED 90. Did they pay the same rate? Explain your reasoning.

Lesson 7: Ratio and Rate Problems

Solve.

1. Ibrahim is making guacamole. He uses 2 tablespoons of cilantro for every 3 avocados. At this rate, how many tablespoons of cilantro will he need for 9 avocados?

2. The ratio of blue marbles to white marbles in a bag is 4 to 5. At this rate, how many blue marbles are there if there are 15 white marbles?

3. Fatima must mix 6 tablespoons of plant food for every 2 gallons of water. If she has 6 gallons of water, how much plant food should she use?

4. At a local fruit stand, Maha spends AED 3.96 for 2 pounds of strawberries. How much can she expect to pay for 4 pounds of strawberries?

5. On her pogo stick, Ashia made 24 hops in 30 seconds. At this rate, how many hops will she make in 50 seconds?

6. On a test, Mona answered 12 out of the first 15 problems correctly. If this rate continues, how many of the next 25 problems will she answer correctly?

7. The Hawks soccer team won 12 out of 14 games. If this rate continues, how many games will they win if they play a total of 21 games?

8. At a harvest, 16 ears of corn are being picked for every 18 peppers. If 9 peppers have been picked, how many ears of corn have been picked?

9. At a road work site, 20 cones are placed along 50 feet of road. How many cones are placed along 35 feet of road?

10. A pronghorn antelope can travel 105 miles in 3 hours. If it continued traveling at the same speed, how far could a pronghorn travel in 11 hours?

Chapter 2: "Fractions, Decimals and Percent"

Lesson 1: Decimals and Fractions

Write each decimal as a fraction in simplest form.

1. 0.7 _____
2. 0.09 _____
3. 0.065_____
4. 0.25 _____
5. 0.75 _____
6. 0.0045_____
7. 0.98 _____
8. 0.844 _____
9. 13.09_____

Write each fraction or mixed number as a decimal.

10. $\frac{6}{8}$ _____
11. $9\frac{4}{8}$ _____
12. $\frac{13}{260}$ _____

13. $7\frac{26}{80}$ _____

14. The school is 0.5 km away from home. Write this decimal as a fraction.

_____

15. An orange is approximately $\frac{3}{5}$ the size of another larger orange. Write the fraction as a decimal.

_____

Lesson 2: Percents and Fractions

Write each percent as fraction in simplest form.

1. 20 % _____
2. 75% _____
3. 25%_____
4. 45%_____
5. 80%_____

Write each fraction as a percent.

6. $\frac{16}{40}$ _____
7. $\frac{15}{45}$ _____

8. $\frac{1}{5}$ _____

9. $\frac{7}{50}$ _____

10. $\frac{3}{20}$ _____

11. Ahmad ate 35% of his candy. Write the percent as a fraction in simplest form.

_____

12. Khalifa got a 15 % discount on a new t-shirt. Write the percent as a fraction in simplest form.

_____

13. 65% of the children went on the field trip. Write the percent as a fraction in simplest form.

_____

Look at the table below and answer the questions below.

The table shows the fraction of students that like to eat different flavors of cake.

Students	Chocolate	Vanilla	Banana	Peanut butter
Cake type	$\frac{5}{12}$	$\frac{4}{12}$	$\frac{2}{12}$	$\frac{1}{12}$

14. What is the percent of students that like chocolate? _____

15. What is percent of students that like Vanilla? _____

Lesson 3: Percents and Decimals

Write each percent as a decimal.

1. 5 % _____
2. 70% _____
3. 85%_____
4. 68%_____
5. 99%_____

Writes each decimal as a percent.

6. 0.65 _____
7. 0.25_____
8. 0.8_____
9. 0.63_____
10. 0.42_____

11. A toy was on a 36% percent discount. Write the percent as a decimal.
12. Ahmad ate 0.65 of a bag of candy. Write the decimal as a percent.

Lesson 4: Percents Greater than 100% and Percents Less than 1%

Write each percent as a decimal.

1. 700% _____
2. 0.05% _____
3. 650%_____
4. 0.345%_____

Write each percent as a mixed number or a fraction in simplest form.

5. 250% _____
6. 0.95% _____
7. 0.60%_____
8. 185%_____

Write each decimal as a percent.

9. 3.5 _____
10. 3.83_____
11. 75.4_____
12. 6.95_____

Write each fraction or mixed fraction as a percent.

13. $7\frac{3}{4}$ _____
14. $\frac{1}{300}$ _____

15.The number of students will increase by $2\frac{3}{5}$ in the next two years. Write the mixed fraction as a percent.

_____

Lesson 5: Compare and Order Fractions, Decimals and Percents

Compare and place a greater than, equal to or less than sign.

1. $\frac{2}{5}$ ____ $\frac{4}{5}$

2. $4\frac{1}{8}$ _____ $\frac{7}{8}$

3. $\frac{9}{12}$ _____ $2\frac{1}{4}$

4. 0.3125_____ $\frac{6}{15}$

Order the fractions from least to greatest.

5. $\frac{7}{4}, \frac{6}{12}, \frac{4}{6}, \frac{5}{6}$

_____

6. $\frac{2}{3}, \frac{7}{9}, \frac{3}{9}, \frac{1}{3}$

_____

Order the decimals from greatest to least.

7. 0.9877, 0.09877, 0.009877, 9.877

_____

8. 2.45, 3.67, 4.98, 4.22

_____

Order the set of values from least to greatest.

9. $0.5, \frac{6}{24}$, 48%

_____

10. $0.85, \frac{6}{8}$, 35%

_____

11. The scores on a Math test in three different sections were, 0.8, $\frac{3}{5}$, 78%, Compare the scores from greatest to least.

    _____

12. The transportation in a city includes 3 different types. 40% drive a car, 0.67 drive a bicycle and $\frac{24}{40}$ take the bus. Compare the types of transportation from least to greatest.

    _____

Lesson: 6: Estimate with Percents

Estimate each percent.

1. 17% of 52 _____

2. 19% of 95 _____

3. 96% of 310 _____

4. 66% of 812 _____

Estimate using rate per 100.

5. 16% of 196 _____

6. 21% of 324 _____

7. 18% of 433 _____

8. 7% of 507 _____

9. A school has 179 students. About 56% of the students have 3 siblings. Estimate the number of students that have 3 siblings.

_____

10. A person wants to loose 12% of his body fat. If he weighs 112 kilograms. Estimate the amount of weight that amount of body fat in kilograms that he will need to loose.

_____

Lesson 7: Percent of Number

Find the percent of each number.

1. 20% of 355 _____

2. 35% of 250 _____

3. 75% of 360 _____

4. 30% of 660 _____

5. 0.25% of 360 _____

6. 250% of 5 _____

7. 450% of 20 _____

8. 0.65% of 80 _____

9. 108% of 108 _____

10. 0.05% of 15000 _____

11. A shirt costs AED 255. There is a 25% discount.

    Percent discount x cost of shirt = _____

12. A student got a 155% increase in money from his parents at the end of his allowance. If his allowance is AED 160 per month.

    Percent increase x allowance per month _____

Lesson 8: Solve Percent Problems

Solve each of the following:

1. 25 is 30% of what number? _____
2. 5 is 25% of what number? _____
3. 18 is 35% of what number? _____
4. 65 is 75% of what number? _____
5. 40 is 8% of what number? _____
6. 65 is 50% of what number? _____
7. 34 is 17% of what number? _____
8. 63 is 7% of what number? _____
9. 6 % of what number is 36? _____
10. 9 % of what number is 72? _____
11. 12% of what number is 30? _____
12. 25% of what number is 9? _____

Chapter 3: Compute with Multi-Digit Numbers

Lesson 1: Add and Subtract Decimals

1. Find each sum or difference.

a) 1.532 + 0.04

b) 0.002 + 0.1571

c) 100.8 + 27

d) 58.9 – 43.6

e) 21.31 – 7.03

f) 63 – 5.04

2. Lateefa bought groceries for AED 207.24 and new shoes for AED 89.36. How much did Lateefa spend on groceries and shoes altogether?

3. Sultan buys 12.25 kg of potatoes and 4.05 kg of corn. What is the difference between the 2 weights?

Lesson 2: Estimate Products

1. Estimate each product.

a) 2.12×8.4

b) 21.7×13.8

c) 54.2×17

d) 2.4×15

e) 54×3.1

f) 95×3.1

2. Use estimation to determine whether each answer is reasonable. If the answer is reasonable, write *yes*. If not, write *no* and provide a reasonable estimate.
   a) $2{,}103 \times 24 = 50{,}472$

   b) $42.8 \times 65 = 24{,}300$

3. Fahed can bike about 17.6 kilometers per hour. About how many kilometers can he ride in 2.6 hours?

4. The prices in the table show the cost per hour of each activity at the Fun Zone. About how much would it cost for 6 people to play mini football?

Mini football	AED 54.25
Karting	AED 43.75
Ice Skating	AED 34.50

5. A cake recipe calls for 49.8 grams of sugar. About how many grams of sugar would you need for 12 cakes?

Lesson 3: Multiply Decimals by Whole Numbers

1. Multiply.

a) 0.4×7

b) 0.9×32

c) 2.7×5

d) 8.6×41

e) 51×8.12

f) 92×0.108

2. Mariam buys 24 pencil. Each pencil costs AED 3.25. Find the total cost.

3. Store A sells cupcakes for AED 5.50 each, and store B sells each cupcake for AED 5.75. If Salem buys a dozen cupcakes, how much can he save by buying them from Store A instead of store B.

Lesson 4: Multiply Decimals by Decimals

1. Multiply.

   a) 0.5×0.7

   b) 4.4×2.3

   c) 2.05×7.1

   d) 12.54×81.52

   e) 41.05×11.004

   f) 0.062×61.5

2. A factory produces 12.5 tons of cheese per day. How much cheese will the factory produce in 12.5 days?

3. Bananas cost AED 17.50 per kilogram at a local market. Find the total cost of 6.6 kilograms.

Lesson 5: Divide Multi-Digit Numbers

1. Find each quotient.

a) $4{,}761 \div 45$

b) $7{,}532 \div 18$

c) $216 \div 12$

d) $6{,}902 \div 54$

e) $7{,}920 \div 71$

2. Salama is reading a book that has 750 pages. She has 15 days to finish the book. If Salama reads the same number of pages each day, how many pages should she read each day?

3. The football team is raising money to have new uniform. The cost of the team uniforms is AED 5,760. The team has 12 months to raise the money. How much do they need to raise each month?

4. A plane travels at a constant speed of 880 kilometers per hour, how long will it take the plane to travel 5,280 kilometers?

Lesson 6: Estimate Quotients

1. **Estimate each quotient.**

   a) $9.8 \div 2.3$

   b) $12.8 \div 5.8$

   c) $88.4 \div 11.2$

   d) $74.6 \div 25$

   e) $123.9 \div 11.2$

   f) $369.1 \div 6.2$

2. Use estimation to determine whether each answer is reasonable. If the answer is reasonable, write *yes*. If not, write *no* and provide a reasonable estimate.

   a) $37.4 \div 18.8 = 4$

   b) $126.2 \div 25.9 = 5$

3. Fatema walks 18.2 kilometers in 3.6 hours. Estimate her speed in kilometers per hour.

Lesson 7: Divide Decimals by Whole Numbers

1. Divide. Round to the nearest tenth if necessary.

a) $24.6 \div 4$

b) $145.7 \div 7$

c) $76.83 \div 13$

d) $43.28 \div 18$

e) $102.5 \div 15$

f) $162.24 \div 12$

2. Saleh wants to figure out what grade he is getting in math. His test scores were 75.8, 92.2, 87, 69.5, and 88.7. What was his average test score? What grade will he receive?

Grade	Average Score
A	90 – 100
B	80 – 89
C	70 – 79
D	60 – 69
F	0 – 59

3. There are 15 servings in a 420.5-grams box of cereals. How many grams are in a serving?

4. Ahmed, Hamed, Zayed and Sultan are splitting their dinner bill. The total is AED 430.25. How much does each owe if they shared the bill equally among them?

Lesson 8: Divide Decimals by Decimals

1. Divide.

a) $15.64 \div 2.3$

b) $18.21 \div 0.9$

c) $0.015 \div 0.05$

d) $0.915 \div 7.5$

e) $11.9 \div 1.2$

f) $0.0254 \div 0.008$

2. Meera has 55.2 kg of sugar. She wants to divide them evenly in small bags. Each bag can hold 1.2 kg of sugar. How many bags does she need?

3. Zayed has AED 672.60. He wants to but movie tickets. Each tickets costs AED 35.40. How many tickets can he buy?

Chapter 4: Multiply and Divide Fractions

Lesson 1: Estimate Products of Fractions

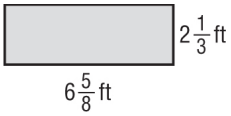
Estimate each product.

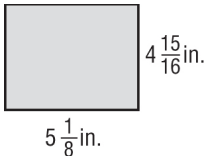
- $\frac{1}{2} \times 28$
- $\frac{1}{4} \times 20$
- $\frac{1}{5}$ of 83
- $\frac{1}{7}$ of 47
- $\frac{5}{2} \times 23$
- $\frac{2}{7} \times 76$
- $\frac{2}{5}$ of 37
- $\frac{6}{7}$ of 51

- $\frac{3}{5} \times \frac{2}{9}$

- $\frac{7}{8} \times \frac{4}{5}$

Estimate the area of each rectangle.

16. 

17. 

Khalid is using the recipe for sculpture-carving material shown at the right.

a. About how many cups of cement would he need to make $\frac{4}{9}$ batch of the recipe?

b. About how many cups of sand would he need to make $\frac{6}{7}$ batches of the recipe?

Girostone Recipe
5 cup vermiculite
$1\frac{1}{4}$ cup cement
$\frac{5}{8}$ cup sand
water to form thick paste

Lesson 2: Multiply Fractions and Whole Numbers

Multiply. Write in simplest form.

1. $15 \times \frac{1}{15}$

2. $45 \times \frac{1}{3}$

3. $72 \times \frac{1}{9}$

4. $15 \times \frac{2}{3}$

5. $24 \times \frac{3}{8}$

6. $20 \times \frac{3}{4}$

7. $11 \times \frac{9}{10}$

8. $11 \times \frac{3}{4}$

9. $10 \times \frac{6}{7}$

10. $14 \times \frac{6}{7}$

Problem Solving:

- At a charity bike rally, $\frac{2}{3}$ of the student population in a Middle School participated. If there are 1,200 students in the school, how many participated?

- At a local river, there were 48 alligators laying on the riverbank. If $\frac{5}{6}$ of the alligators were asleep, how many were *not* asleep?

Lesson 3: Multiply Fractions

Multiply. Write in simplest form.

1. $\frac{1}{4} \times \frac{4}{5}$

2. $\frac{7}{8} \times \frac{2}{14}$

3. $\frac{1}{2} \times \frac{3}{4}$

4. $\frac{3}{2} \times \frac{1}{9}$

5. $\frac{1}{33} \times 11$

6. $\frac{1}{12} \times 12$

7. $\frac{5}{7} \times 21$

8. $\frac{3}{5} \times 10$

9. $\frac{1}{8} \times \frac{4}{5}$

10. $\frac{10}{18} \times \frac{9}{25}$

Problem Solving:

- Of the sixth graders in a school, $\frac{4}{5}$ play at least one sport. Of those, $\frac{2}{3}$ play on a team. What fraction of the sixth graders play a sport on a team?

- A model of the ocean floor takes up $\frac{2}{5}$ of the space in an aquarium. If $\frac{3}{8}$ of the model is coral, what fraction of the space in the aquarium is taken up by coral?

Lesson 4: Multiply Mixed Numbers

Multiply. Write in simplest form.

1. $\frac{4}{5} \times 3\frac{1}{8}$

2. $\frac{9}{10} \times 3\frac{1}{3}$

3. $1\frac{3}{5} \times \frac{3}{5}$

4. $\frac{5}{8} \times \frac{2}{3}$

5. $\frac{2}{3} \times 3\mathbf{\frac{1}{4}}$

6. $\frac{3}{4} \times 2\frac{2}{3}$

7. $1\frac{1}{4} \times 2\frac{2}{3}$

8. $5\frac{1}{3} \times 2\frac{1}{4}$

9. $2\frac{1}{5} \times 1\frac{1}{4}$

10. $2\frac{1}{5} \times 1\frac{1}{4}$

Problem Solving:

- A lumber yard has a scrap sheet of plywood that is $23\frac{3}{4}$ inches By $41\frac{1}{5}$ inches. What is the area of the plywood?

- A planter box in the city plaza measures $3\frac{2}{3}$ feet by $4\frac{1}{8}$ feet By $2\frac{1}{2}$ feet. Find the volume of the planter box.

- Mohamed plans on eating $1\frac{1}{4}$ cups of tuna per day for five days. How much tuna does he need? Is 4 cans enough?

- Ahmed would like to bring enough concentrated juice in order to have $2\frac{1}{4}$ cups available per day. How much juice does he need and is 8 boxes of concentrated juice enough?

Lesson 5: Convert Measurement Units

Complete.

1. 4 lb = oz

2. 5 c = pt

3. 3 lb = oz

4. 24 ft = yd

5. $1\frac{1}{2}$ pt = c

6. 64 oz = lb

7. 4 mi = ft

8. $2\frac{3}{4}$ mi = ft

9. 3,000 lb = T

10. 5 gal = qt

11. $3\frac{1}{4}$ qt = pt

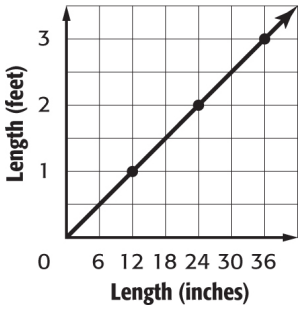
12. $4\frac{5}{8}$ T = lb

Problem Solving:

- The track surrounding a football field is $\frac{1}{5}$ mile long. How many yards long is the track?

- One quart of strawberries weighs about 2 pounds. About how many quarts of strawberries would weigh $\frac{1}{2}$ ton?

*** Use the graph shown.**



a. What does an ordered pair from this graph represent?

b. Write two sentences that describe the graph.

c. Explain how you could use the graph to find the length in inches of a 1.5 foot iguana.

Lesson 6: Divide Whole Numbers by Fractions

Find the reciprocal of each number.

1. $\frac{3}{8}$

2. $\frac{5}{3}$

3. $\frac{1}{9}$

4. $\frac{2}{7}$

5. $\frac{8}{13}$

Divide. Write the quotient in simplest form.

6. $2 \div \frac{1}{4}$

7. $2 \div \frac{6}{15}$

8. $3 \div \frac{15}{4}$

9. $4 \div \frac{1}{20}$

10. $4 \div \frac{1}{14}$

11. $8 \div \frac{2}{16}$

12. $6 \div \frac{6}{5}$

13. $7 \div \frac{14}{8}$

14. $13 \div \frac{3}{5}$

Problem Solving:

- For a party, 40 sandwiches are being made. If each sandwich is cut into thirds, how many sandwich pieces are there?

- An average ant is $\frac{1}{4}$ inch long. A picnic blanket is 72 inches long. How many ants long is the picnic blanket?

- Majid cuts a 60-inch-long wire into pieces that are $\frac{3}{4}$ inch long. How many pieces does he have?

Lesson 7: Divide Fractions

Divide. Write the quotient in simplest form.

1. $\frac{2}{7} \div \frac{1}{7}$

2. $\frac{1}{9} \div \frac{2}{3}$

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

4. $\frac{2}{3} \div \frac{1}{6}$

5. . $\frac{1}{2} \div \frac{2}{5}$

6. $\frac{2}{3} \div \frac{1}{4}$

7. $\frac{3}{4} \div \frac{1}{10}$

8. $\frac{2}{5} \div \frac{1}{4}$

Problem Solving:

- An average ant is $\frac{1}{8}$ inch long. An average aphid is $\frac{3}{32}$ inch long. How many times longer is an average ant than an average aphid?

- A field has an area of $\frac{9}{20}$ square mile. Find the width of the field if the length is $\frac{9}{10}$ mile long.

Lesson 8: Divide Mixed Numbers

Divide. Write the quotient in simplest form.

1. $2 \div 3\frac{2}{3}$

2. $10 \div 1\frac{1}{4}$

3. $4\frac{3}{4} \div \frac{7}{8}$

4. $14\frac{15}{16} \div \frac{7}{8}$

5. $7\frac{1}{2} \div 1\frac{1}{4}$

6. $3\frac{3}{8} \div 2\frac{1}{4}$

7. $2\frac{1}{10} \div 1\frac{1}{5}$

8. $4\frac{1}{2} \div 2\frac{7}{10}$

9. $6\frac{2}{3} \div \frac{4}{5}$

10. $1\frac{2}{9} \div \frac{5}{6}$

Problem Solving:

- Suppose a hurricane traveled 130 miles from a point in the Atlantic Ocean to the Florida coastline in $6\frac{1}{2}$ hours. How many miles per hour did the hurricane travel?

- How many $\frac{3}{4}$-foot lengths of pipe can be cut from a $6\frac{1}{3}$-foot pipe?

- A truck driver drove 300 miles in $6\frac{3}{4}$ hours. How many miles per hour did the driver drive?

- A bag contains $22\frac{1}{2}$ cups of flour. A recipe for pancakes uses $1\frac{1}{4}$ cups of flour. How many batches of pancakes can be made with one bag of flour?

General Revision on Term 1

Revision on Chapter 1: "Ratios and Rates"

- Find the greatest common factor or the least common multiple of each set of numbers.

  a. 16 and 32

     GCF = _____

  b. 24 and 18

     GCF = _____

  c. 12 and 20

     LCM = _____

- Write 20 cookies to 35 brownies as a ratio in simplest form.

  cookies : brownies = 20 : 35 = _____ : _____

- Write 261 miles in 3 hours as a unit rate.

  261 miles/3 hours = ____ miles/hour.

- Complete the following:

  a. A _____ is a comparison of two quantities of the same units.

  b. A rate is _____.

  c. The greatest common factor of 3 , 12 , 18 is _____.

  d. The least common multiple of 6 and 15 is _____.

  e. $\frac{11}{50} = \frac{33}{\quad}$

f. $\frac{2}{9} = \frac{28}{\quad} = \frac{\quad}{72}$

g. The simplest form of the ratio 210 : 700 is _____ : _____.

h. Another form of the ratio $\frac{1.2}{2.4}$ is _____ : _____ which can be simplified to _____ : _____.

- If 45 cookies will serve 15 students. How many cookies are needed for 30 students? (show your work in the space below).

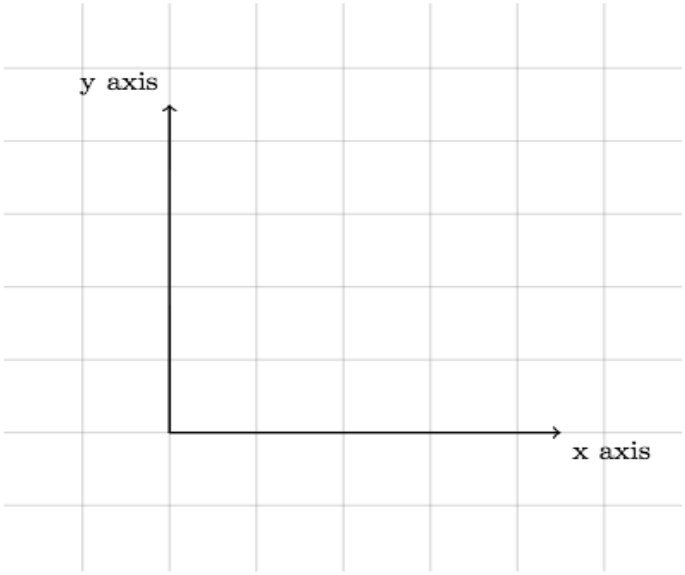
- Out of 30 students surveyed, 17 have a cat. Based on these results, predict how many of the 300 students in the school have a cat?

- Ola can read at a rate of 1,100 words in 5 minutes. How many pages can Ola read in one minute?

- To make 5 apples pies, you need about 2 kg of apples. How many kilograms of apples do you need to make 20 apple pies? (Complete the table to get the right answer).

Number of Pies	5	?	20
Kgs. of Apples	2	?	?

- The table shows the total time it took Laila to read 0 , 1 , 2 and 3 pages of a book.
  1. Graph the ordered pairs.



Laila's Reading		
No. of Pages, X-axis	**Total Minutes, Y-axis**	**Ordered Pair, (x , y)**
0	0	(0 , 0)
1	4	(1 , 4)
2	8	(2 , 8)
3	12	(3 , 12)

2. Describe the pattern in the graph.

_____
_____
_____

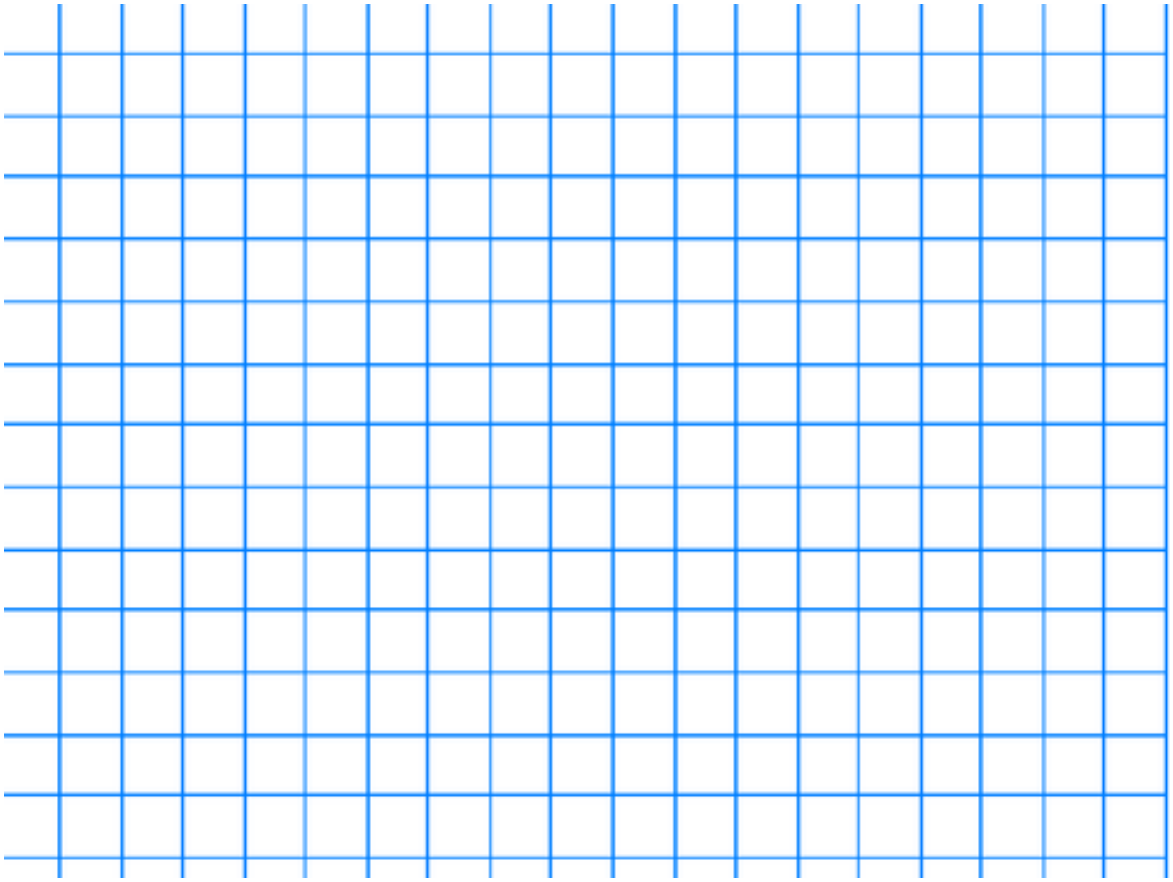
- **Two friends are each saving money in their bank accounts. Fatima saves AED 10 each week while Noura saves AED 15 each week.**

1. Make a table for each friend that shows the total amount saved for 1 , 2 , 3 and 4 weeks. List all the information as ordered pairs (weeks, total dirhams saved).

Fatima		
Weeks, X-axis	**Total Saved (AED), Y-axis**	**Ordered Pair, (x , y)**
1		
2		
3		
4		

Noura		
Weeks, X-axis	**Total Saved (AED), Y-axis**	**Ordered Pair, (x , y)**
1		
2		
3		
4		

2. Graph the ordered pairs for each friend on the same coordinate plane. Explain how this is shown on the graph.



Revision on Chapter 2: "Fractions, Decimals and Percent"

1. Write each fraction as a decimal and each decimal as a fraction in simplest form.

   a. $\frac{8}{20} =$ _____

   b. $0.64 =$ _____

   c. $\frac{3}{100} =$ _____

   d. 0.05 = _____

2. Write each percent as a decimal and each decimal as a percent.

   a. 98% = _____

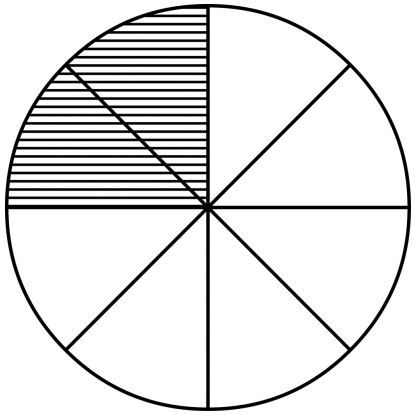
   b. 0.3 = _____

   c. 216% = _____

   d. 0.05% = _____

   e. 1.25 = _____

3. The circle at the right is divided into sections of equal sizes. What percent of the circle is shaded?



Answer = _____ %

4. Fill in each ◯ with <, > or = to make a true statement.

   a. $\frac{5}{8}$ ◯ $\frac{7}{12}$

   b. $\frac{3}{4}$ ◯ 0.7

   c. 7% ◯ $\frac{7}{10}$

   d. 42% ◯ 0.44

5. Estimate 47% of 692.

   Answer ≈ _____

6. Estimate 60% of 27

   Answer ≈ _____

7. Estimate 67% of AED 296

   Answer ≈ _____

8. Find the percent of each number.

   a. 32% of 60 = _____

   b. 0.55% of 220 = _____

   c. 145% of 320 = _____

9. 30 is 50% of what number?

10. 120 is 30% of what number?

11. Sarah spent 60% of her money to buy a new TV. If the TV costs AED 300, how much money did she save?

12. Salman runs 0.75 a mile each day. How far has he run at the end of 6 days?

Revision on Chapter 3: "Compute with Multi-Digit Numbers"

1. Carry out the following operations.

a. 2.0789
+ 6. 75
_____
…….

b. 5.764
- 0.91
_____
……

c. 6.32
+ 9.88
_____
……

d. 23.5 x 3 = _____

Show your work here ↓

e. 0.095 x 15 = _____

f. 351 ÷ 9 = _____

g. 878 ÷ 31 = _____

h. 0.566 ÷ 4 = _____

i. 2.25 ÷ 0.5 = _____

j. 3.69 ÷ 0.3 = _____

k. 12.54 x 1000 = _____

l. 7.17 ÷ 100 = _____

m. 0.008 ÷ 10 = _____

2. Estimate the product of 9.6 x 2.7

Show your work here ↓

3. Estimate the product of 34.2 x 21.5

4. Estimate the quotient of 49.3 ÷ 7

5. Estimate the quotient of 45 ÷ 2.1

6. Estimate the quotient of 76.2 ÷ 18.4

7. A king cobra has a mass of 8.845 kg. Round the mass to the nearest tenth kilogram.

   Answer ≈ _____

8. The same king cobra is 4.237 meters long. Round the length to the nearest meter.

   Answer ≈ _____

Revision on Chapter 4: "Multiply and Divide Fractions"

1. Estimate the product of each of the following:

   a. $\frac{1}{5} \times 16 =$ _____

   b. $\frac{3}{4} \times 23 =$ _____

   c. $\frac{5}{8} \times \frac{9}{10} =$ _____

   d. $\frac{5}{6}\ of\ \frac{1}{9}$ = _____

2. A border is made of $32\frac{2}{3}$ bricks that are $1\frac{1}{6}$ meters long. About how long is the border?

3. Carry out each of the following operations:

   a. $9 \times \frac{1}{3} =$ _____

   b. $\frac{2}{5} \times 4 =$ _____

   c. $\frac{3}{4} \times \frac{4}{9} =$ _____

   d. $\frac{3}{10} \times \frac{5}{6} =$ _____

show your work here ↓

4. Multiply: $\frac{2}{3} \times 2\frac{1}{2}$

5. Multiply: $3\frac{1}{3} \times \frac{3}{8}$

6. Multiply: $1\frac{3}{4} \times 2\frac{4}{5}$

7. A waffle recipe calls for $2\frac{1}{4}$ cups of flour. If Mariam wants to make $1\frac{1}{2}$ times the recipe, how much flour does she need?

8. A new shirt costs AED 14.99. If the shirt is on sale for $\frac{1}{5}$ off its price, about how much would you save?

9. Find the reciprocal of $\frac{2}{7}$.

10. Divide:

a. $4 \div \frac{3}{4} =$ _____

b. $\frac{5}{6} \div 10 =$ _____

c. $\frac{5}{6} \div \frac{2}{3} =$ _____

d. $\frac{1}{6} \div \frac{4}{7} =$ _____

e. $4\frac{1}{5} \div 2\frac{1}{3} =$ _____

f. $1\frac{5}{9} \div 2\frac{1}{3} =$ _____

Fractions

11. A box has bags of oranges, each bag of orange weighs $4\frac{3}{4}$ kg. How many bags of oranges are in the box if it weighs $28\frac{1}{2}$ kg.

Good Luck