تجميعة أسئلة وفق الهيكل الوزاري منهج ريفيل

تاريخ إضافة الملف على موقع المناهج: 2024-12-17 14:19:00

المزيد من مادة رياضيات:	ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس

التواصل الاجتماعي بحسب الصف السابع

صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

المزيد من الملفات بحسب الصف السابع والمادة رياضيات في الفصل الأول

1. The cost of pumpkins is shown in the table. **Determine whether the cost of a pumpkin is proportional to the number bought by graphing the relationship on the coordinate plane**.

Number of Pumpkins	0	1	2	3	4
Cost ($)	0	4	8	12	16

1

Determine if a relationship Is a proportional by analyzing its graph

Q1-4

Page 39

2. The table shows temperatures in degrees Celsius and their equivalent temperatures in degrees Fahrenheit. **Determine whether the temperature** in **degrees Fahrenheit is proportional to the temperature in** degrees **Celsius by graphing the**

relationship on the coordinate plane. Explain.

1

Determine if a relationship Is a proportional by analyzing its graph

Q1-4

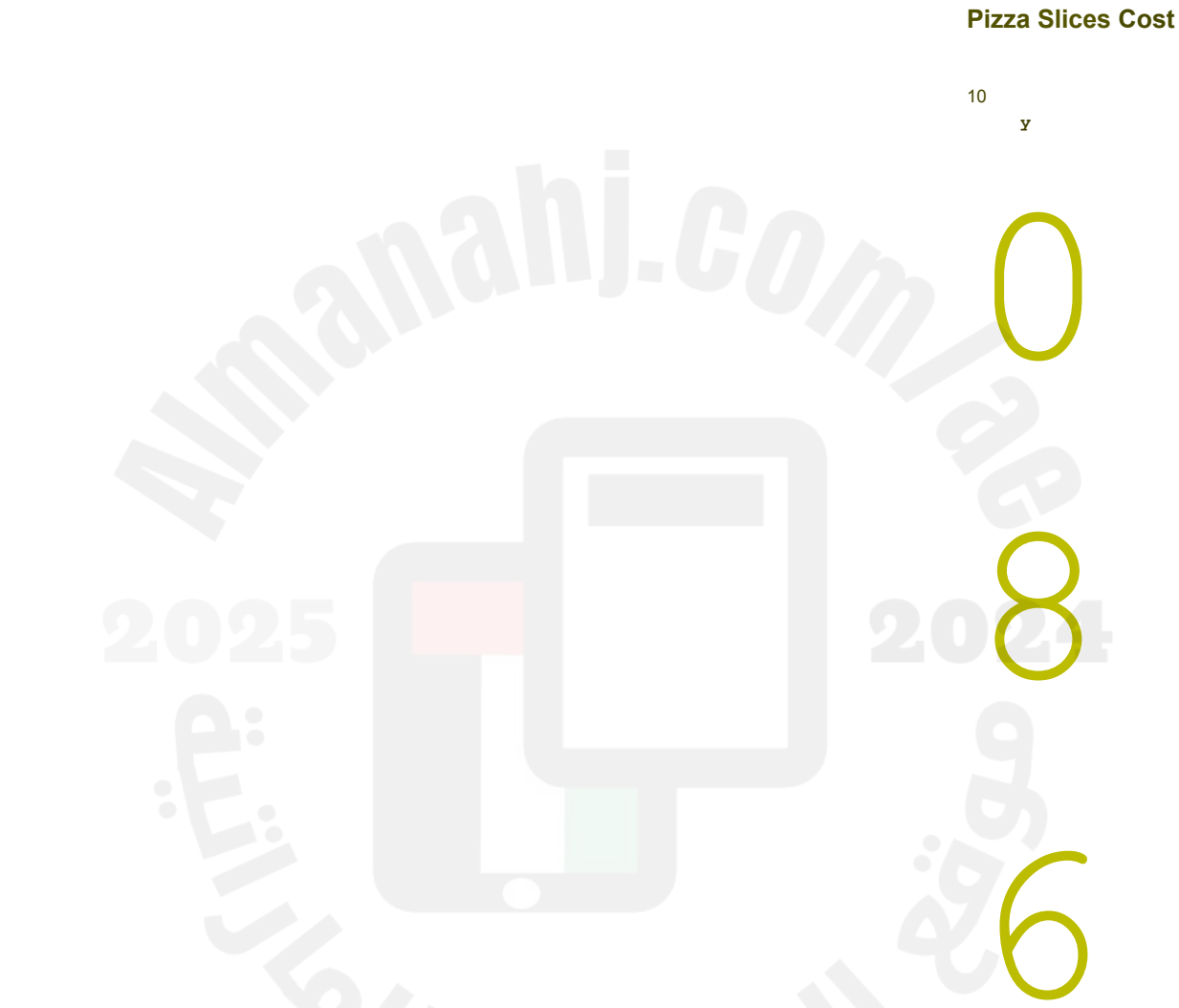
3. The total cost of online streaming is proportional to the number of months. **What is the constant of proportionality?**

1

Determine if a relationship Is a proportional by analyzing its

4. The cost per slice of pizza is proportional to the number of slices as shown in the graph.

What do the points (0, 0) and (1, 2) represent?



4

2

0

2

Write equations to represent proportional relationships

Q1-6

1. Liv earns $9.50 for every two bracelets she sells. The equation y = 4.75x, where x represents the number of bracelets and y represents the total cost in dollars earned, represents this situation. **What is the constant of proportionality? What does** the **constant of proportionality represent in the context of the problem?**

2

Write equations to represent proportional relationships

Q1-6

Page 47

2. John ran 3 miles in 25.5 minutes. The equation $y = 8.5x$, where x represents the number of miles and y represents the total time in minutes, represents this situation. **What is the constant of proportionality? What does the constant of proportionality represent in the context of the problem?**

2

Write equations to represent proportional relationships

Q1-6

Page 47

3. Lincoln bought 3 bottles of an energy drink for $4.50. **Write an equation relating the total cost** y **to the number of energy drinks bought** x.

4. The total cost of renting a cotton candy machine for 4 hours is $72. **What equation can be used to model the total cost** y **for renting the cotton candy machine** x **hours?**

2

Write equations to represent proportional relationships

Q1-6 Page 47

5. Marley used 7 cups of water to make 4 loaves of French bread. **What equation can be used to model the total cups of water needed** y **for making** x **loaves of French bread?**

How many cups of water do you need for 6 loaves of French bread?

2

Write equations to represent proportional relationships

Q1-6

Page 47

3

6. Mrs. Henderson used 6 yards of fabric to make 3 elf costumes. **What equation**

4

can be used to model the total number of yards of fabric y **for** x **costumes? How many yards of fabric do you need for 7 elf costumes?**

3 **Use proportional relationships to find the amount of tax charged for an item** Q1-8

Find the total cost to the nearest cent.

Page 81

1. $18 breakfast; 7% tax

2. $24 shirt; 6% tax

3. $49.95 pair of shoes; 5% tax

3

Use proportional relationships to find the amount of tax charged for an item

Q1-8

Page 81

4. Emily wants to buy new boots that cost $68. The sales tax rate in her city is 5%.

What is the total cost for the boots?

3 **Use proportional relationships to find the amount of tax charged for an item**

Q1-8

Page 81

5. Jack wants to buy a coat that costs $74.95. The sales tax rate in his city is 6%.

What is the total cost for the coat?

2

3 **Use proportional relationships to find the amount of tax charged for an item**

Q1-8

Page 81

6. Mr. Phuong stayed in a hotel room for 2 nights that cost $210. The hotel room tax rate in the city is 12%. **What is the total cost** for **the hotel room?**

3

Use proportional relationships to find the amount of tax charged for an item

Q1-8

Page 81

7. The cost of a hotel room during Lacy's trip is $325. The hotel room tax in the city she is in is 10.5%. **What is the total cost of the hotel room?**

3 **Use proportional relationships to find the amount of tax charged for an item**

Q1-8

Page 81

8. Robert spends $30.45, before tax, at the bookstore. If the sales tax rate in his city is 7.25%, **what is the total cost of his purchase?**

4 **Use proportional relationships to solve percent error problems.**

Q1-7

Page 119

1. Doug estimates that his soccer team will win 7 games this year. The team actually wins 10 games. **What is the percent error of Doug's estimate? Round the answer to the nearest tenth percent, if necessary**.

4

Use proportional relationships to solve percent error problems.

Q1-7

Page 119

2. A mayor estimates that 4,000 people will attend the first day of the county fair. A total of 8,400 people actually attend the first day of the fair. **What is the percent error of the mayor's estimate? Round the answer to the nearest tenth percent**, if necessary.

4

Use proportional relationships to solve percent error problems.

Q1-7 Page 119

3. Maya estimates that the wait time for her favorite roller coaster is 35 minutes. The actual wait time is 55.5 minutes. **What is the percent error of Maya's estimate? Round the answer to the nearest tenth of a percent, if necessary**.

4

Use proportional relationships to solve percent error problems.

Q1-7

Page 119

4. Oliver estimates the weight of his cat to be 16 pounds. The actual weight of his cat is 14.25 pounds. **What is the percent error of Oliver's estimate rounded to** the **nearest tenth of a percent?**

4

Use proportional relationships to solve percent error problems.

Q1-7

Page 119

5. A jar of marbles should contain 100 marbles. The jar actually has 99 marbles. **What is the percent error to the nearest hundredth of a percent?**

4

Use proportional relationships to solve percent error problems.

Q1-7

Page 119

6. A cyclist estimates that he will bike 80 miles this week. He actually bikes 75.5 miles. **What is the percent error of the cyclist's estimate rounded to the** nearest **hundredth of a percent?**

4

Use proportional relationships to solve percent error problems.

Q1-7

Page 119

7. The table shows the predicted and actual amount of snow for a local city. **What** is **the percent error for the amount of snowfall? Round the answer to the nearest tenth of a percent if necessary**.

	Snowfall (inches)
Predicted	
Actual	6.75
	10.25

5

Use the order of integer operations to evaluate expressions.

Evaluate each expression if $a = -2$, $b = 3$, $c = -12$ *and* d

7. $\frac{bd}{a} + c$

8. $\frac{ac}{a}(a + d) = -4$.

9. $\frac{d3}{a2}$ 1/2 - (c + b)

5

Use the order of integer operations to evaluate expressions.

Evaluate each expression if $m = = -32$, $n = 2$, $p = -8$ *and* $r = 4$.

10. $\frac{pr+m}{n}$

11. $\frac{p2}{m}$

$(np + r)$

Q7-12 **Page 169**

12. $22 - (m + np)$

3

p

1-2

6

Add rational numbers.

Add. Write in simplest form.

7. $3\ 2\ 2 +$ (-11)

8. -131 **+4**

4

3

1

4

6

Add rational numbers.

Add. Write in simplest form.

10. 2 1/2 + (-/-)

9.

$$-\frac{3}{8} + 2\frac{3}{8}$$

11. -3.7 +1

12. +4.1

Q7-14

Page 195

Q7-14

Page 195

Add rational numbers.

14. -0.25 +3 +212

1

12

Add. Write in simplest form.

13. −11 +0.75 +0.45

Q7-14

Page 195

6

Use the rules for dividing integers to divide rational numbers.

$\frac{x}{y}$

5

13. Evaluate = if x == and y = -0.1. Write your answer in simplest form.

14. **Evaluate if** *c* =-4.75

and

d

$d = -11$. Write your answer

4

in simplest form.

Q13-15

Page 219

a

= -1 and

15. Evaluate = if $a =$

—

b

4

$b = 0.02$. Write your answer in simplest form.

الإمارات العربية المتحدة وزارة التربية والتعليم

Part (2) 15 questions

4 Marks per question

MCQ

tul

مجلس

21

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7

Page 19

Determine if the situation represents a proportional relationship. Explain your reasoning.

1. A salad dressing calls for 3 parts oil and 1 part vinegar. Manuela uses 2 tablespoons of vinegar and 6 tablespoons of oil to make her salad dressing.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7

Page 19

Determine if the situation represents a proportional relationship. Explain your reasoning.

2. A specific shade of orange paint calls for 2 parts yellow and 3 parts red. Catie uses 3 cups of yellow paint and 4 cups of red paint to make orange paint.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7

Page 19

Determine if the situation represents a proportional relationship. Explain your reasoning.

3. A saltwater solution for an aquarium calls for 35 parts salt to 1000 parts water. Tareq used 7 tablespoons of salt and 200 tablespoons of water.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7

Page 19

Determine if the situation represents a proportional relationship. Explain your reasoning.

4. A conveyor belt moves at a constant rate of 12 feet in 3 seconds. A second conveyor belt moves 16 feet in 4 seconds.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7 **Page 19**

Determine if the situation represents a proportional relationship. Explain your reasoning.

5. A tectonic plate in Earth's crust moves at a constant rate of 4 centimeters per year. In a different part of the world, another tectonic plate moves at a constant rate of 30 centimeters in ten years.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7 **Page 19**

Determine if the situation represents a proportional relationship. Explain your

reasoning.

2

6. A strand of hair grows at a constant rate of inch per month. A different strand of hair grows at a constant rate of 4 inches per year.

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q1-7

Page 19

7. Multiselect One blend of garden soil is 1 part minerals, 1 part peat moss, and 2 parts compost. Select all of the mixtures below that are in a proportional relationship with this blend.

5 ft3 minerals, 5 ft3 peat moss, 10 ft3 compost

10 ft3 minerals, 15 ft3 peat moss, 15 ft3 compost

12 ft3 minerals, 12 ft3 peat moss, 24 ft3 compost

20 ft3 minerals, 20 ft3 peat moss, 40 ft3 compost

100 ft3 minerals, 100 ft3 peat moss, 200 ft3 compost

50 ft3 minerals, 50 ft3 peat moss, 50 ft3 compost

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q3-4

Page 59

3. Multiselect One recipe for homemade playdough calls for 4 parts flour, 1 part salt, and 2 parts water. Select all of the mixtures below that are in a proportional relationship with this recipe.

8 cups flour, 2 cups salt, 4 cups water

2 cups flour, cup salt, cup water

6 cups flour, 1 cups salt, 3 cups water

10 cups flour, 1 cup salt, 2 cups water

7

Use models and ratio reasoning to understand how a proportional relationship can exist between quantities

Q3-4

Page 59

4. **Open Response** The ratio of Braydon's number of laps he ran to the time he ran is 6: 2. The ratio of Monique's number of laps she ran to the time she ran is 10: 4. Explain why these ratios are not in a proportional relationship

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

For the situation, complete the table given. Does the situation represent a proportional relationship? Explain.

1. "The cost of a school lunch is

$2.50."

Lunches Bought 1 2 3

Total Cost ($)

4

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

For the situation, complete the table given. Does the situation represent a proportional relationship? Explain.

2. "Anna walks her dog at a constant rate of 12 blocks **Number of Blocks** 12 24 **36** 48

in 8 minutes."

Number of Minutes

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

For the situation, complete the table given. Does the situation represent a proportional relationship? Explain.

3. "Fun Center rents popcorn machines for $20 per hour.

Hours 1 2 3 4

In addition to the hourly charge, there is a rental fee of $35." Cost ($)

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

For the situation, complete the table given. Does the situation represent a proportional relationship? Explain.

4. "Jean has $280 in her savings account. Starting next

Weeks

1

2 3

4

week, she will deposit $30 in her account every week." Saving ($)

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

5. Rocko paid $12.50 for 25 game tickets. Louisa paid $17.50 for 35 game tickets. **What is the constant of proportionality?**

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8 **Page 29**

6. A baker, in 70 minutes, iced 40 cupcakes and, in 49 minutes, iced 28

cupcakes. **What is the constant of proportionality?**

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

7. The table shows the amount of dietary fiber in bananas. Use the table to **find the constant of proportionality**.

Bananas	3	6	9	12
Dietary Fiber (g)	9.3	18.6	27.9	37.2

8

Determine whether two quantities shown in a table are in a proportional relationship by testing for equivalent ratios

Q1-8

Page 29

4. **Open Response** The table shows the distance traveled by a runner. Use the table to **find the constant of proportionality** Distance (mi) 4.55 13.65 **22.75** 31.85

9

Time(h
)

0.5

1.5

2.5

3.5

Identify the constant of proportionality in the equation representing a proportional relationship.

Q8-13

Page 48

8. Roman can type 3 pages in 60 minutes. **How many more pages can Roman type in 90 minutes than in 60 minutes?** Assume the relationship is proportional and he types at a constant rate.

9

Identify the constant of proportionality in the equation representing a

Q8-13

proportional relationship.

9. On average, Asia makes 14 out of 20 free throws. Assuming the relationship is proportional, **how many more free throws is she likely to make if she shoots 150 free throws?**

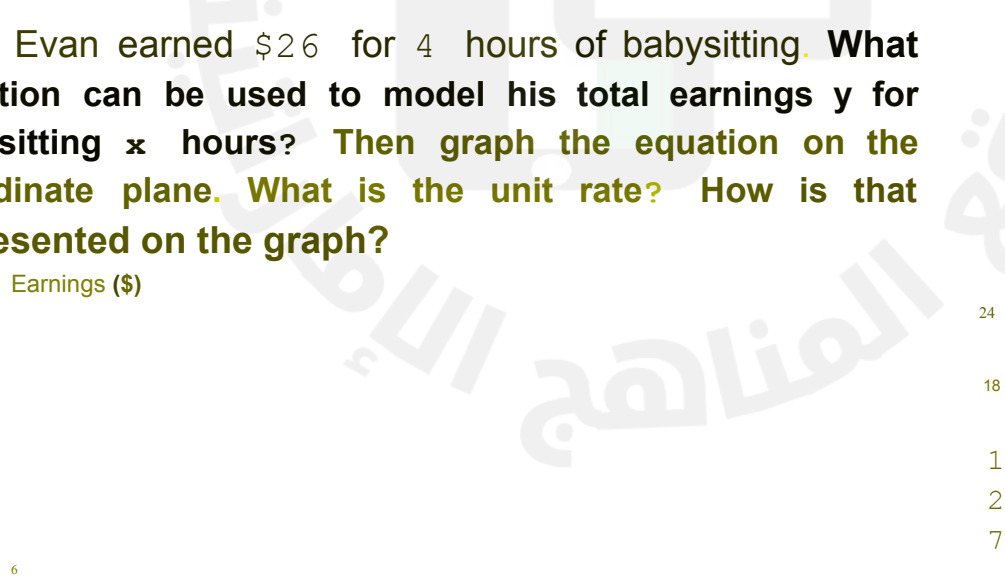
9

Identify the constant of proportionality in the equation representing a proportional relationship.

Q8-13

Evan's Earnings

10. Evan earned $26 for 4 hours of babysitting. **What equation can be used to model his total earnings y for babysitting x hours? Then graph the equation on the coordinate plane. What is the unit rate? How is that represented on the graph?**



x

2

4 6 8

Hours

9

Identify the constant of proportionality in the equation representing a proportional relationship.

Q8-13

Page 48

11. Persevere with Problems The Diaz family spent $38.25 on 3 large pizzas. **What is the cost of one large pizza?** Assume the situation is proportional. Explain how you solved.

9

Identify the constant of proportionality in the equation representing a proportional relationship.

Q8-13

Page 48

12. Use a Counterexample Determine whether the statement is true or false. If **false, give a counterexample**.

The constant of proportionality *in* an equation can never be *0.*

9

Identify the constant of proportionality in the equation representing a proportional relationship.

Q8-13

Page 48

13. Justify Conclusions A recipe for homemade modeling clay includes $\frac{4}{5}$ cup of salt for every cup of water. If there are 6 cups of salt, **how many gallons of water are needed**? **Identify the constant of proportionality**. **Explain your reasoning**.

10

Solve problems involving proportional relationships by making a table, using a graph, or writing an equation.

Q7-12

Page 56

7. The ratio of kids to adults at a school festival is 11 : 7. Suppose there are a total of 810 kids and adults at the festival. **How many adults are at the festival?**

10

Solve problems involving proportional relationships by making a table, using a graph, or writing an equation.

Q7-12

Page 56

8. The ratio of laptops to tablets in the stock room of a store is 13: 17. If there are a total of 90 laptops and tablets in the stock room, **how many laptops are in the stock room?**

9. Persevere with Problems Lisa is painting the exterior surfaces at her home. A gallon of paint will cover 350 square feet. **How many gallons of paint will Lisa need to paint one side of her fence? Explain how you solved.**

Item to Paint	Length(ft)	Width(ft)
France		
Barn Door	26	7
	11	6

using a graph, or writing an equation.

Q7-12

Page 56

10. Find the Error The rate of growth for a plant is 0.2 centimeter per 0.5 day. A student found the number of days for the plant to grow 3.6 centimeters to be 1.44 days. **Find the error and correct it**.

10

Solve problems involving proportional relationships by making a table, using a graph, or writing an equation.

Q7-12

Page 56

11. Create Write a real-world problem involving a proportional relationship. Then solve the problem.

12. Be Precise When is it more beneficial to solve a problem involving a proportional relationship using equation than using a graph?

an

11

Find unit rates when one or both quantities are fractions

Q1-8

Page 11

1. truck driver drove 48 miles in 45 minutes. At this rate, **how many miles can the truck driver drive in one hour**?

11

Find unit rates when one or both quantities are fractions

9

Q1-8

Page 11

2. Russell runs mile in 5 minutes. At this rate, **how many miles can he run in one**

10

minute?

11

Find unit rates when one or both quantities are fractions

Q1-8

Page 11

3. A small airplane flew 104 miles in 50 minutes. At this rate, **how many miles can** it

fly in one hour? (50 minutes = hour)

5

6

4. DeAndre downloaded 8 apps onto his tablet in 12 seconds. At this rate, **how many apps could he download in one minute? (12 seconds == minute)**

1

5

11

Find unit rates when one or both quantities are fractions

Q1-8

Page 11

3

5. In Lixue's garden, the green pepper plants grew 5 inches in month. At this rate,

how many feet can they grow in one month? (Let 5 inches =

4

5

foot)

9

11

Find unit rates when one or both quantities are fractions

Q1-8

10

1

6. Thunder from a bolt of lightning travels — mile in second. At this rate, **how many**

miles can it travel in one second?

11

Find unit rates when one or both quantities are fractions

Q1-8 Page 11

3

7. The average sneeze can travel

mile in 3 seconds. At this rate, **how far can it**

100

1

travel in one minute? (3 seconds =

minute)

20

11

Find unit rates when one or both quantities are fractions

Q1-8

Page 11

3

8. Multiselect Anita is making headbands for her softball team. She needs a total of yard of fabric. **Select all types of fabric that cost less than $8 per yard**.

4

cotton

Fabric

Total Cost For-Yard ($)

4

flannel

Cotton 5.54

Flannel 2.62

☐ **fleece**

terry cloth

Fleece 4.27

6. A music video website received 5,000 comments on a new song they released. The next day, the artist performed the song on television and an additional 1,500 comments were made on the website. **What was the percent of increase?**

12
Use proportional relationships to solve percent of change problems
Q1-10
Page 71

7. When Ricardo was 9 years old, he was 56 inches tall. Ricardo is now 12 years old and he is 62 inches tall. **Find the percent of increase in Ricardo's height to** the **nearest tenth**.

12

Use proportional relationships to solve percent of change problems

Q1-10

Page 71

8. At a garage sale, Petra priced her scooter for $15.50. She ended up selling it for $10.75. **Find the percent of decrease in the price of the scooter. Round to the nearest tenth if necessary.**

12

Use proportional relationships to solve percent of change problems

Q1-10

Page 71

9. At the beginning of a baking session, there were 2.26 kilograms of flour in the bag. By the end of the baking session, there was 0.98 kilogram of flour in the bag. **What is the percent of decrease, rounded to the nearest tenth, for the amount of flour?**

12

Use proportional relationships to solve percent of change problems

Q1-10

Page 71

10. Open Response The table shows the number of candid pictures of students for the yearbook for two consecutive years. **What was the percent of decrease in the number of candid student pictures from 2015 to 2016, rounded to the nearest tenth?**

12

Use proportional relationships to solve percent of change problems

Q1-2

Page 123

1. Open Response An ice cream shop had 316 customers the first weekend it opened.

The second weekend it had 468. **What is the percent of increase in the number of customers? Round to the nearest percent**.

12

Use proportional relationships to solve percent of change problems

Q1-2 **Page 123**

2. Equation Editor Julia wants to purchase a pair of headphones that are on sale for $42.79. The sales tax rate in her county is 6%. Calculate the amount of sales tax Julia will pay on the purchase. Round to the nearest cent if necessary.

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time. **Find the simple interest earned, to the nearest cent, for each principal, interest rate, and time.**

Q1-10 **Page 105**

1. $530, 6%, 1 year

2. $1200, 3.5%, 2 years

3. $750, 7%, 3 year

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

Q1-10 **Page 105**

4. Elena's father put $460 into a savings account for her. The account pays 2.5% simple interest each year. If he neither adds nor withdraws money from the account, **how much interest will the account earn after 4 years? Round to the nearest cent.**

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

13

Q1-10 **Page 105**

5. Ethan put $1,250 into a savings account. The account pays 4.5% simple interest on an annual basis. If he does not add or withdraw money from the account, **how much interest will he earn after 2 years? Round to the nearest cent.**

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

Q1-10 Page 105

6. Marc deposits $840 into a savings account. The account pays 2% simple interest on an annual basis. If he does not add or withdraw money from the account, **how much interest will he earn after 6 months? Round to the nearest cent**.

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

Q1-10

Page 105

7. Nina's grandmother deposits $3,000 into a savings account for her. The account pays 5.5% simple interest on an annual basis. If she does not add or withdraw money from the account, **how much interest will she earn after 21** months**? Round to** the

nearest cent.

Use the simple interest formula to find the amount of interest earned for a

Q1-10

13

given principal, at a given interest rate, for a given period of time.

Page 105

8. Jack borrows $2,700 at a rate of 8.2% per year. **How much simple interest will** he **owe if it takes 3 months to repay the loan? Round to the nearest cent**.

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

Q1-10 Page 105

9. Liliya's parents borrow $1,400 from the bank for a new washer and dryer. The interest rate is 7.5% per year. **How much simple interest will they pay if they take 18 months to repay the loan? Round to the nearest cent.**

13

Use the simple interest formula to find the amount of interest earned for a given principal, at a given interest rate, for a given period of time.

Q1-10 Page 105

10. Open Response The table shows the interest rates for auto repair loans based on how long it takes to pay off the loan. Jin borrows $3,600 and plans to pay the loan off in 18

months. **How much simple interest will he owe if it takes 18 months to repay the loan? Round to the nearest cent.**

Time	Rate (%)
6 months	3.5
12 months	4.0
18 months	4.25

14

Use proportional relationships to find the amount to pay for a tip

Find the total cost to the nearest cent.

Q1-10

Page 89

1. $20 haircut; 10% tip

2. $24 lunch; 15% tip

3. $185 TV; 5% markup

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

4. Vera went to the local salon to get a haircut. The cost was $24. Vera tipped the hair stylist 18%. **What was the total cost of haircut including the tip? Round to the nearest cent.**

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

5. The Gomez family ordered $39.50 worth of pizza and subs. They gave the delivery person a 20% tip. **What was the total cost of the** food **and tip? Round to the nearest cent.**

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

6. The wholesale cost of a bicycle is $98.75. The markup for the bicycle is 33.3%. **Find the selling price of the bicycle. Round to the nearest cent.**

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

7. The wholesale cost for a purse in a department store is $12.50. The store plans to mark up the purse by 140%. **What will be** the **selling price of the purse? Round to the nearest cent**.

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

8. Keri is making doll clothes for a holiday craft show. The wholesale cost of the materials for one outfit is $9.38. If she sells an outfit for $15, **what is the percent of markup? Round to the nearest percent**.

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

9. A pet store sells a large dog kennel for $98.50. The wholesale cost of the kennel is $63.55. **What is the percent of markup? Round to the nearest percent.**

14

Use proportional relationships to find the amount to pay for a tip

Q1-10

Page 89

10. Open Response An elementary school wants to purchase a new swing set. The table shows the selling price of the swing sets they are interested in buying. The markup for both swing sets is 20%. The school decides to buy the Adventurers swing set. **What is the selling price of the swing set they are buying?**

4

Swing Set	Wholesale Price
Adventurers	
Thunder Ridge	

($)

3,056

4,125

15 Use proportional relationships to find the amount of discount or markdown Q1-10 Page 97

Find the sale price to the nearest cent.

1. $140 coat; 10% discount **2.** $80 boots; 25% discount **3.** $325 tent; 15% discount

15 Use proportional relationships to find the amount of discount or markdown **Q1-10** Page 97

4. A toy store is having a sale. A video game system has an original price of $99. It is on sale for 40% off the original price. **Find the sale price** of **the** game **system. Round to the nearest cent**.

15 Use proportional relationships to find the amount of discount or markdown **Q1-10**

Page 97

5. A yearly coffee club subscription costs $65. Avery received an offer for 62% off the subscription cost. **What is the sale price** of **the subscription? Round to the nearest cent**.

15

Use proportional relationships to find the amount of discount or markdown Q1-10
Page 97

6. During a clearance sale at a sporting goods store, skateboards were marked down 30%. On Saturday, an additional 25% was taken off already reduced prices of skateboards. If a skateboard originally cost $119.50, **what was the final price after all discounts had been taken? Round to the nearest cent**.

15

Use proportional relationships to find the amount of discount or markdown

Q1-10

Page 97

7. At an electronics store, a smart phone is on sale for 35% off the original price of $679. If you use the store credit card, you can receive an additional 15% off the sale price. **What is the final price of the smart phone if you use the store credit card? Round to the nearest cent**.

15 **Use proportional relationships to find the amount of discount or markdown** Q1-10 **Page 97**

8. Gary had a 40% discount for new tires. The sale price of a tire was $96.25. **What was the original price of the tire? Round to the nearest cent.**

15 **Use proportional relationships to find the amount of discount or markdown** Q1-10 **Page 97**

9. A swimsuit is on sale for $45.50. If the sale price is discounted 5% from the original price, **what was the original price? Round to the nearest cent.**

15 **Use proportional relationships to find the amount of discount or markdown** **Q1-10** **Page 97**

10. Open Response A shoe store is having a clearance sale on their summer shoes. All summer shoes are marked 55% off. A sign states you can take an additional 10% off the clearance sale prices. Kelly is deciding between two pairs of sandals shown in the table. If she buys the blue sandals, **what is** the **final price Kelly will pay? Round to the nearest cent.**

Shoes	Original Price
Blue Sandals	$75
Tan Sandals	$68

Use different methods, including algebra tiles, number lines,or absolute

16

value, to add integers

Add.

1.-3+ (-8)=

2.-11+ (-13) =

3.9+(-35) =

16

Add.

Use different methods, including algebra tiles, number lines,or absolute value, to add integers

Q1-14 **Page 137**

Q1-14

Page 137

4.-28 +14=

5. -22 + (-10) + 15 =

6. 18+ (-12) + 5 =

16

Use different methods, including algebra tiles, number lines, or absolute value, to add integers

7. Roger owes his father $15. He borrows another $25 from him. **What integer represents the balance that he owes his father?**

Q1-14

Page 137

8. A football team lost 14 yards on their first play then lost another 7 yards on the next play. **What integer represents the total change in yards for the two plays?**

16

Use different methods, including algebra tiles, number lines, or absolute value, to add integers

9. Kwan's beginning account balance was $20. His ending balance is $0. **What integer represents the change in his account balance from beginning to end?**

Q1-14 **Page 137**

10. Lucy's dog lost 6 pounds. **How much weight does her dog need to gain in order to have a net change of 0**

pounds?

16

Use different methods, including algebra tiles, number lines, or absolute value, to add integers

11. The table shows Jewel's scores for the first 9 holes and the second 9 holes of her game of golf. **What integer represents her score for the entire game?**

Holes	Score
1-9	3 over par
10-18	4 under par

Q1-14

Page 137

12. At 4:00 A.M., the outside temperature was -28°F. By 4:00 P.M. that same day, it rose 38 degrees. **What integer represents the temperature at 4:00 P.M.?**

16

Use different methods, including algebra tiles, number lines,or absolute value, to add integers

13. In 20 seconds, a roller coaster goes up a

100-meter hill, then down 72 meters, and then back up a 48-meter rise. **How much higher or lower from the start of the ride is the coaster after the 20 seconds?**

Q1-14 Page 137

14. Open Response Joe opened a bank account with $80. He then withdrew $35 and deposited $115. **What is his account balance after these transactions?**

Use different methods, including algebra tiles, number lines, or the additive inverse, to subtract integers

17

Q1-15 Page 147

Subtract.

1.9−(-2)=

2.-20-10=

3.13-(-63) =

Use different methods, including algebra tiles, number lines, or the additive inverse, to subtract integers

17

Subtract.

4.28-14=

5.-10-0=

6.-3333 =

Use different methods, including algebra tiles, number lines, or the additive inverse, to subtract integers

17

Subtract.

7.-18-(-12)=

8.-28-(-13)=

9. -18-(-40)=

17

Use different methods, including algebra tiles, number lines, or the additive inverse, to subtract integers

Q1-15

Page 147

10. Evaluate *ab* if *a* = 10 and *b* = -7.

11. Evaluate x - y if *x* = -11 and *y* = 26.

17

Use different methods, including algebra tiles, number lines, or the additive

inverse, to subtract integers

Q1-15 Page 147

12. Find the distance between -6 and 7 on a number line.

13. Find the distance between -14 and 5 on a number line.

18

Use number lines and mathematical properties to multiply integers.

Q1-13 Page 157

Multiply.

4. -6(-8)=

5. -10(-10)=

6. -11(-13) =

18

Use number lines and mathematical properties to multiply integers.

Q1-13 Page 157

Multiply.

7. 7(-5)(4) =

8. (-8)(-7)(3) =

9. -2(-12)(-8)=

18

Use number lines and mathematical properties to multiply integers.

Q1-13

Page 157

10. Evaluate ab

if $a = -16$ and $b = -5$.

11. Evaluate xy

if $x = -10$ and $y = -7$.

18

Use number lines and mathematical properties to multiply integers.

Q1-13

Page 157

12. Evaluate $xyz2$

if $x = -2$, $y = 7$ and $z = -4$.

13. Evaluate $a2bc$

if $a = 3$, $b = -14$ and $c = -6$.

18

Use a related multiplication sentence to divide integers

Q1-12

Page 165

Divide .

1.22 ÷ (-2) =

2.-110 ÷ 11=

3.75 ÷ (-3)=

18

Use a related multiplication sentence to divide integers

Q1-12

Page 165

Divide .

4. -64 ÷ (-8)=

5. -39 ÷ (-13)=

6. -50 ÷ (-10)=

18

Use a related multiplication sentence to divide integers

Evaluate each expression if $m = -32$, n = -32, $n = 2$, and $p = -8$.

7.- $\frac{m}{n}$

8. $\frac{m}{P}$

9. $\frac{P}{n}$

Q1-12 **Page 165**

18

Use a related multiplication sentence to divide integers

Evaluate each expression if $f = -15$, $g = 5$, and $h = -45$.

10. g

11. $h / f =$

12. h g

Q1-12 Page 165

19

Divide rational numbers and convert fractions to decimal equivalents using division

Q1-12 Page 183

Write each fraction as a decimal. Determine if the decimal is a terminating decimal.

1.

5

1

8

||

2. −3=

4

3.

/=

2

9

5

4.

6

19

Divide rational numbers and convert fractions to decimal equivalents using

division

Q1-12

Page 183

Write each fraction as a decimal. Determine if the decimal is a terminating decimal.

5. −=

4

5

6.

23

50

3155

8.

1.

7. − 2/2

=

9

22

17

24

2

7
2
5

19

Divide rational numbers and convert fractions to decimal equivalents using

division

Q1-12 **Page 183**

Write each fraction as a decimal. Determine if the decimal is a terminating decimal.

9. $\frac{1}{33}$

10. $-11\frac{7}{40}$ =

11. $13/2 = 13\frac{3}{2}$

12. $-\frac{7}{7}$ =

Find the additive inverse of a rational number

Q1-4

Page 195

Find the additive inverse of each rational number.

20

1. $-\frac{1}{2}$

2. $0.25 =$

3. $\frac{10}{19}$

4. $-0.4 =$

21

Subtract rational numbers by adding the additive inverse

Subtract. Write in simplest form.

Q1-12

Page 201

1. -2.45-(-3.9) = **2.** -4.6-(-2.31) =

3. 5.47-(-2.8) =

3. -6.2-3.79 =

21

Subtract rational numbers by adding the additive inverse

Subtract. Write in simplest form.

5.

7음- (−32)

=

6. 5 9

10

(—

)

Q1-12 Page 201

7

7. $-\frac{8}{6}-2\frac{금}{층}=$

21

Subtract rational numbers by adding the additive inverse

Subtract. Write in simplest form.

8. $-1-3-1=-\frac{15}{5}$

9. $-90-(-40)=$

Q1-12

Page 201

10. $5-(-3)\frac{6}{}=$

21

Subtract rational numbers by adding the additive inverse

Subtract. Write in simplest form.

11. 2

−를−

(-) =

12. 7 4 −

2− (-1)=

10 15 =