

Summer Math Packet

Welcome to your Summer Math Packet. Over the summer months, students tend to lose at least one month's worth of information due to "not using their brains" (at least not the same way they do during school time). Who wants to have to relearn everything? What a waste of time!! One way to reduce that loss is by keeping your brain active – hence, this packet.

This packet has been designed to review skills you have already learned and will need to succeed in math next year. Each grade has their own packet, this one was designed for you, the student going into Pre-Algebra (grade 7).

For the most part, there are 10-12 pages in each packet – one for each week of summer. If you want to take a break the first week of summer, do so, just make sure you do an extra page another week. The same thing goes for any weeks of vacation you may take. Most, if not all of the pages, have information about how to do the math on the page, so that you and your parents can figure it out if you are having trouble. If you still can't figure it out, try www.khanacademy.org. It should not take more than 30 minutes to do any of these pages each week.

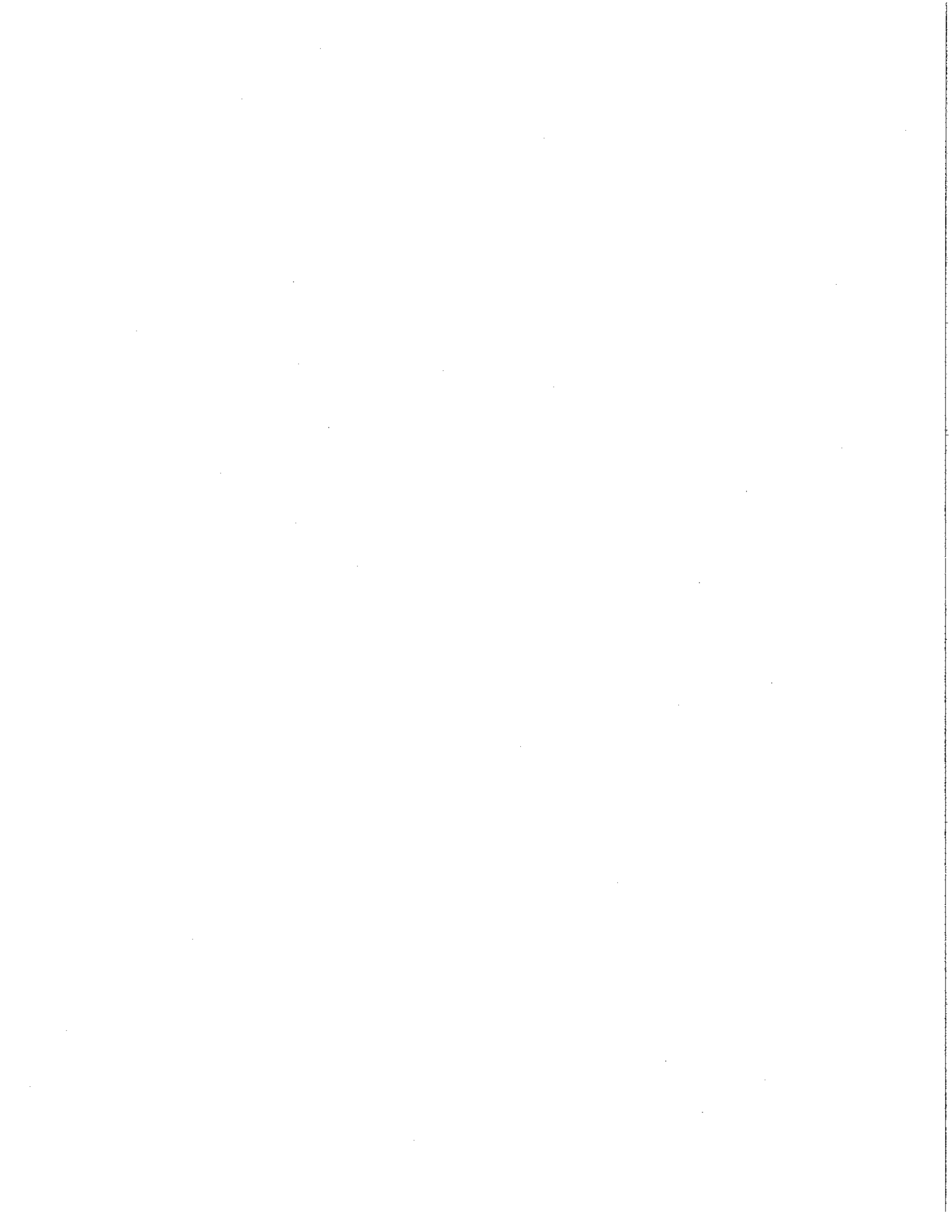
This IS REQUIRED – it will go into the grade book as a grade based on what you have complete. All those who complete it will also receive a treat in September, in recognition of your hard work. Please do not lose this, but if you do, it can be found on the school website.

Please be ready to turn this in to Mrs. Jackson by the second day of school.

Enjoy your summer!

Keep thinkin'!

Mrs. Jackson (Mrs. J)



Review 5

Adding and Subtracting Decimals

Add $3.25 + 12.6 + 18.93$.

First estimate.	3.25	→	3
	12.6	→	13
	<u>+18.93</u>	→	<u>19</u>
			35

Then follow these steps.

- ① Line up the decimal points. Write in any needed zeros. ② Add as you would add whole numbers. Regroup when needed. ③ Place the decimal point.

$$\begin{array}{r} 3.25 \\ 12.60 \\ +18.93 \\ \hline \end{array}$$

$$\begin{array}{r} \overset{11}{3.25} \\ 12.60 \\ +18.93 \\ \hline 34.78 \end{array}$$

$$\begin{array}{r} 3.25 \\ 12.60 \\ +18.93 \\ \hline 34.78 \end{array}$$

← Compare to your estimate.

To subtract decimals, follow similar steps. Work from right to left and regroup when needed. Place the decimal point to complete the subtraction.

First estimate and then find each sum.

1. $0.9 + 6.7$

Estimate _____

Sum _____

2. $3.1 + 9.4$

Estimate _____

Sum _____

3. $4.88 + 8.19$

Estimate _____

Sum _____

Use mental math to find each sum.

4. $14.05 + 9.75$

5. $6 + 0.22 + 0.78$

6. $9.104 + 5.01 + 7.99$

First estimate and then find each difference.

7. $8.5 - 4.2$

Estimate _____

Difference _____

8. $7.2 - 3.05$

Estimate _____

Difference _____

9. $5.07 - 2.8$

Estimate _____

Difference _____

10. $6.347 - 2.986$

11. $14.2 - 9.86$

12. $13.45 - 5.001$

13. $22.7 - 12.06$

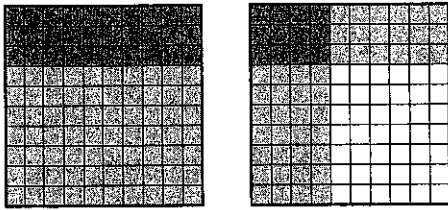
14. $16.1 - 10.88$

15. $1.79 - 0.879$

Review 7

Multiplying Decimals

Multiply 0.3×1.4 . This drawing can help you find 0.3×1.4 .



Each small square is 1 hundredth or 0.01.
Each column or row is 10 hundredths or 1 tenth or 0.1.

- ① Shade 3 rows across to represent 0.3.
 - ② Shade 14 columns down to represent 1.4.
 - ③ The area where the shading overlaps is 42 hundredths or 0.42.
- $0.3 \times 1.4 = 0.42$

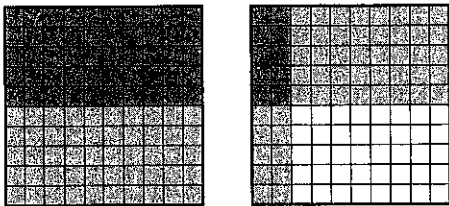
Compare the result from the model to the result of multiplying the factors.

$$\begin{array}{r}
 0.3 \quad \leftarrow \text{1 decimal place} \\
 \times 1.4 \quad \leftarrow \text{+1 decimal place} \\
 \hline
 12 \\
 + 030 \\
 \hline
 0.42 \quad \leftarrow \text{2 decimal places}
 \end{array}$$

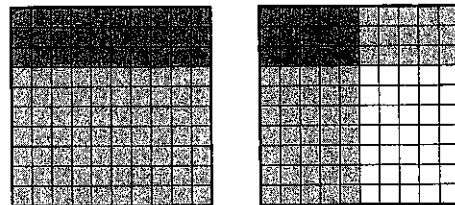
When multiplying decimals, first multiply the factors as though they are whole numbers. Then add the number of decimal places in each factor to find the number of decimal places in the product.

Write a multiplication statement to describe each model.

1.



2.



For each product place the decimal point in the correct place.

3. $0.9 \times 2.8 = 252$

4. $3.1 \times 77 = 2387$

5. $6.22 \times 8 = 4976$

6. $19.6 \times 2.03 = 39788$

Find each product.

7. 1.6×3.7

8. 8.12×59

9. 12.3×6.1

10. 5.9×1.2

11. 23.4×5.2

12. 4.8×42

13. 9.2×12.4

14. 120×7.6

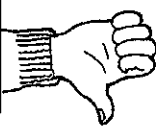
15. 3.15×2.3

Name _____

Adding Integers


Wrong!

-6	6	0	-1	= -13
M	A	T	H	



Right!

-6	6	0	-1	= 6 + -7 = -1
M	A	T	H	



- Remember**
1. If the signs are the same, add the numbers and keep the same sign in the sum.
 2. If the signs are different, subtract the numbers and keep the sign of the number with the larger absolute value.

A	6
B	5
C	4
D	3
E	2
F	1
G	0
H	-1
I	-2
J	-3
K	-4
L	-5
M	-6
N	-6
O	-5
P	-4
Q	-3
R	-2
S	-1
T	0
U	1
V	2
W	3
X	4
Y	5
Z	6

Use the decoder to write the value of each letter. Find a subtotal for the positive numbers and the negative numbers within each word. Then find the total value of the word. Draw a line to the star with the matching answer.

1. $\frac{\text{A}}{\text{M}} \frac{\text{L}}{\text{A}} \frac{\text{G}}{\text{T}} \frac{\text{E}}{\text{H}} \frac{\text{B}}{\text{R}} \frac{\text{R}}{\text{A}} = \underline{\quad} + \underline{\quad}$



2. $\frac{\text{I}}{\text{M}} \frac{\text{N}}{\text{A}} \frac{\text{T}}{\text{T}} \frac{\text{E}}{\text{H}} \frac{\text{G}}{\text{T}} \frac{\text{E}}{\text{H}} \frac{\text{R}}{\text{R}} \frac{\text{S}}{\text{S}} = \underline{\quad} + \underline{\quad}$



3. $\frac{\text{P}}{\text{M}} \frac{\text{O}}{\text{M}} \frac{\text{S}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{T}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{V}}{\text{M}} \frac{\text{E}}{\text{M}} = \underline{\quad} + \underline{\quad}$



4. $\frac{\text{N}}{\text{M}} \frac{\text{E}}{\text{M}} \frac{\text{G}}{\text{M}} \frac{\text{A}}{\text{M}} \frac{\text{T}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{V}}{\text{M}} \frac{\text{E}}{\text{M}} = \underline{\quad} + \underline{\quad}$



5. $\frac{\text{A}}{\text{M}} \frac{\text{D}}{\text{M}} \frac{\text{D}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{T}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{O}}{\text{M}} \frac{\text{N}}{\text{M}} = \underline{\quad} + \underline{\quad}$



6. $\frac{\text{S}}{\text{M}} \frac{\text{U}}{\text{M}} \frac{\text{B}}{\text{M}} \frac{\text{T}}{\text{M}} \frac{\text{R}}{\text{M}} \frac{\text{A}}{\text{M}} \frac{\text{C}}{\text{M}} \frac{\text{T}}{\text{M}} \frac{\text{I}}{\text{M}} \frac{\text{O}}{\text{M}} \frac{\text{N}}{\text{M}} = \underline{\quad} + \underline{\quad}$



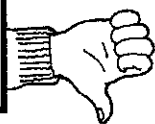
Brain Blaster! Set a target amount, such as -10 or 7. Find a word whose letters add up to that value.

Name _____

Dividing Integers

~~$-32 \div -4 = -8$~~

Wrong!



Right!

$-32 \div -4 = 8$

Remember

1. If two integers have the same sign, either both positive or both negative, their quotient will be positive.
2. If two integers have different signs, one positive and one other negative, their quotient will be negative.

$54 \div 6 = 9$

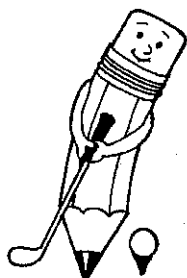
$-54 \div -6 = 9$

$-54 \div 6 = -9$

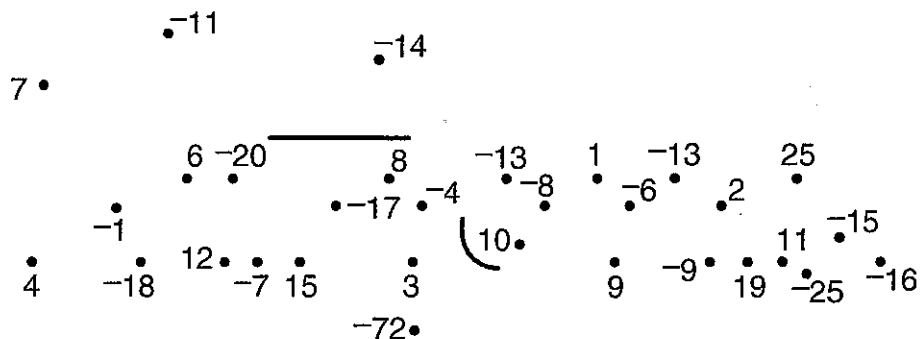
$54 \div -6 = -9$

Subtract. Spell a word by connecting your answers in order.

- | | | |
|---------------------------|-----------------------------|----------------------------|
| 1. $-30 \div 6 =$ _____ | 12. $75 \div 5 =$ _____ | 23. $-96 \div 12 =$ _____ |
| 2. $-48 \div -12 =$ _____ | 13. $-72 \div 18 =$ _____ | 24. $99 \div 11 =$ _____ |
| 3. $22 \div -2 =$ _____ | 14. $-64 \div -8 =$ _____ | 25. $39 \div -3 =$ _____ |
| 4. $28 \div 4 =$ _____ | 15. $51 \div -3 =$ _____ | 26. $-28 \div -14 =$ _____ |
| 5. $-6 \div 6 =$ _____ | 16. $-27 \div -9 =$ _____ | 27. $-45 \div 5 =$ _____ |
| 6. $-18 \div -3 =$ _____ | 17. $-52 \div 4 =$ _____ | 28. $-76 \div -4 =$ _____ |
| 7. $36 \div -2 =$ _____ | 18. $-100 \div -10 =$ _____ | 29. $100 \div 4 =$ _____ |
| 8. $100 \div -5 =$ _____ | 19. $35 \div 7 =$ _____ | 30. $90 \div -6 =$ _____ |
| 9. $108 \div 9 =$ _____ | 20. $144 \div -2 =$ _____ | 31. $-75 \div 3 =$ _____ |
| 10. $-49 \div 7 =$ _____ | 21. $-42 \div 7 =$ _____ | 32. $-77 \div -7 =$ _____ |
| 11. $14 \div -1 =$ _____ | 22. $-12 \div -12 =$ _____ | 33. $-64 \div 4 =$ _____ |



★
-5



Review 22

Greatest Common Factor

You can find the *greatest common factor (GCF)* of 12 and 18 using a division ladder, factor trees, or by listing the factors. Two of these methods are shown.

- ① List the factors of 12 and 18.

12: 1, 2, 3, 4, 6, 12

18: 1, 2, 3, 6, 9, 18

- ② Find the common factors.

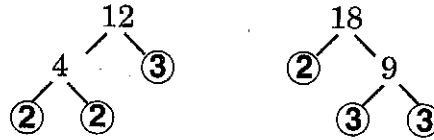
12: ①, ②, ③, 4, ⑥, 12

18: ①, ②, ③, ⑥, 9, 18

The common factors are 1, 2, 3, and 6.

- ③ Name the greatest common factor: 6.

- ① Draw factor trees.



- ② Write each prime factorization.
Identify common factors.

12: ② × 2 × ③

18: ② × ③ × 3

- ③ Multiply the common factors. $2 \times 3 = 6$.
The GCF of 12 and 18 is 6.

List the factors to find the GCF of each set of numbers.

1. 10: _____ 2. 14: _____ 3. 9: _____

15: _____ 21: _____ 21: _____

GCF: _____ GCF: _____ GCF: _____

4. 12: _____ 5. 15: _____ 6. 15: _____

13: _____ 25: _____ 18: _____

GCF: _____ GCF: _____ GCF: _____

7. 36: _____ 8. 24: _____

48: _____ 30: _____

GCF: _____ GCF: _____

Find the GCF of each set of numbers.

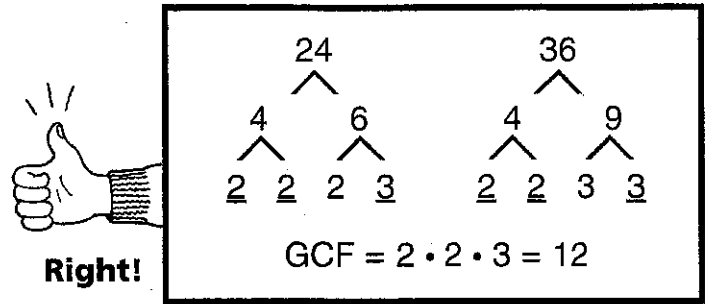
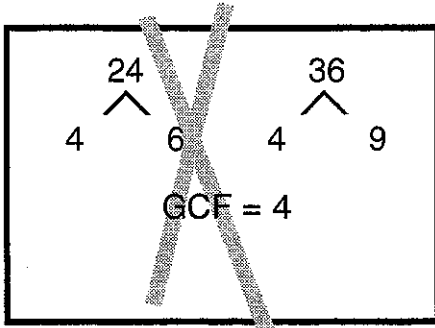
9. 21, 60 _____ 10. 15, 45 _____ 11. 32, 40 _____

12. 54, 60 _____ 13. 20, 50 _____ 14. 21, 63 _____

15. 36, 40 _____ 16. 48, 72 _____ 17. 90, 150 _____

Name _____

Greatest Common Factor

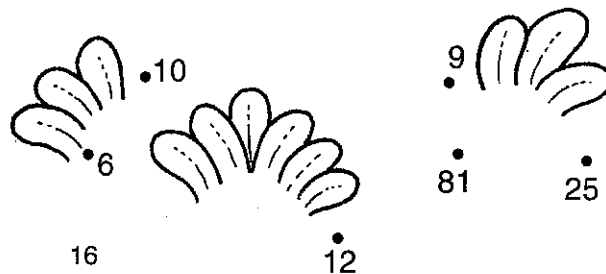
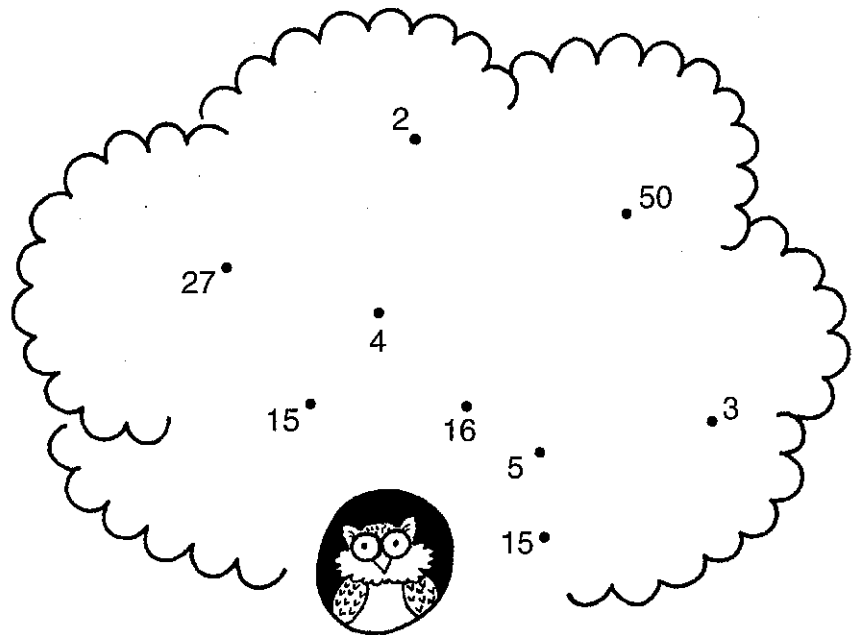


Remember

1. The greatest common factor (GCF) is the greatest number that is a common factor of two or more numbers.
2. Find the prime factorization of each number. Then multiply the prime factors that the numbers have in common to find the GCF.

Find the GCF of each set of numbers. Connect the answers in the order of the problem numbers to illustrate the name of the diagram showing prime factorization.

1. 12 and 18 _____
2. 20 and 30 _____
3. 45 and 60 _____
4. 54 and 81 _____
5. 36 and 52 _____
6. 70 and 72 _____
7. 48 and 80 _____
8. 50 and 100 _____
9. 85 and 100 _____
10. 12, 15, 18 _____
11. 45, 75, 90 _____
12. 36, 54, 99 _____
13. 125 and 175 _____
14. 405 and 486 _____
15. 300 and 312 _____

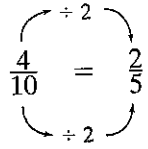
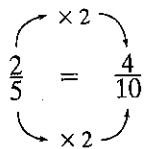


Review 23

Equivalent Fractions

Equivalent fractions are fractions that name the same amount.

To find equivalent fractions, multiply or divide the numerator and denominator by the same number.



So, $\frac{2}{5} = \frac{4}{10}$.

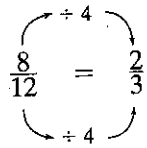
To write a fraction in *simplest form*, divide the numerator and denominator by their greatest common factor.

Example: Write $\frac{8}{12}$ in simplest form.

- ① Find the greatest common factor.

8: 1, 2, **4**, 8
 12: 1, 2, 3, **4**, 6, 12
 The GCF is 4.

- ② Divide the numerator and denominator by the GCF.



$\frac{8}{12}$ in simplest form is $\frac{2}{3}$.

Write two fractions equivalent to each fraction.

- | | | |
|-------------------------|------------------------|------------------------|
| 1. $\frac{5}{6}$ _____ | 2. $\frac{3}{7}$ _____ | 3. $\frac{7}{8}$ _____ |
| 4. $\frac{3}{11}$ _____ | 5. $\frac{3}{6}$ _____ | 6. $\frac{1}{5}$ _____ |

State whether each fraction is in simplest form. If it is not, write it in simplest form.

- | | | |
|---------------------------|---------------------------|---------------------------|
| 7. $\frac{12}{15}$ _____ | 8. $\frac{8}{15}$ _____ | 9. $\frac{9}{21}$ _____ |
| 10. $\frac{15}{22}$ _____ | 11. $\frac{14}{30}$ _____ | 12. $\frac{25}{70}$ _____ |

Write each fraction in simplest form.

- | | | |
|---------------------------|-----------------------------|----------------------------|
| 13. $\frac{12}{24}$ _____ | 14. $\frac{10}{200}$ _____ | 15. $\frac{56}{64}$ _____ |
| 16. $\frac{3}{9}$ _____ | 17. $\frac{130}{170}$ _____ | 18. $\frac{12}{16}$ _____ |
| 19. $\frac{7}{49}$ _____ | 20. $\frac{22}{33}$ _____ | 21. $\frac{30}{225}$ _____ |

22. There are 420 girls out of 1,980 people attending a state fair. In simplest form, what fraction of the people attending are girls?
- _____

Review 33

Subtracting Mixed Numbers

Some mixed numbers can be subtracted mentally.

Find $5\frac{2}{3} - 2\frac{1}{6}$.

- ① Subtract the whole numbers.

$$5 - 2 = 3$$

- ② Then, subtract the fractions.

$$\frac{2}{3} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$

- ③ Combine the two parts.

$$3 + \frac{1}{2} = 3\frac{1}{2}$$

$$5\frac{2}{3} - 2\frac{1}{6} = 3\frac{1}{2}$$

Sometimes you must rename the first fraction before subtracting.

Find $6\frac{1}{2} - 2\frac{3}{4}$.

Cannot subtract

$$\frac{1}{2} - \frac{3}{4}$$

- ① Write with a common denominator.

$$6\frac{1}{2} - 2\frac{3}{4} = 6\frac{2}{4} - 2\frac{3}{4}$$

- ② Rename $6\frac{2}{4}$. $= 5\frac{6}{4} - 2\frac{3}{4}$

- ③ Subtract the whole numbers. $= 3\frac{3}{4}$

Then, subtract the fractions.
Simplify, if necessary.

$$6\frac{1}{2} - 2\frac{3}{4} = 3\frac{3}{4}$$

Find each difference.

1. $7\frac{7}{10} - 2\frac{3}{10}$

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

3. $6\frac{2}{3} - 2\frac{1}{6}$

4. $9\frac{7}{8} - 7\frac{3}{4}$

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

6. $14\frac{1}{3} - 8\frac{1}{4}$

7. $12\frac{1}{3} - 9\frac{2}{3}$

8. $6\frac{5}{8} - 2\frac{3}{4}$

9. $7\frac{5}{7} - 4\frac{13}{14}$

10. $10\frac{2}{3} - 7\frac{5}{6}$

11. $5\frac{7}{16} - 1\frac{1}{2}$

12. $8\frac{2}{5} - 3\frac{2}{3}$

13. $6\frac{1}{8} - 3\frac{1}{16}$

14. $9\frac{5}{12} - 5\frac{3}{4}$

15. $12\frac{3}{4} - 6\frac{1}{8}$

16. $7\frac{2}{5} - 2\frac{1}{4}$

17. $15\frac{5}{12} - 8\frac{1}{3}$

18. $4\frac{1}{10} - 2\frac{4}{5}$

Review 38

Multiplying Mixed Numbers

Example 1: Multiply:

① Change to improper fractions.

② Simplify.

③ Multiply.

④ Simplify.

$$2\frac{1}{7} \times 2\frac{2}{5}$$

$$\frac{15}{7} \times \frac{12}{5}$$

$$3\frac{15}{7} \times \frac{12}{8} \rightarrow 3\frac{15}{7} \times \frac{3}{2}$$

$$\frac{36}{7} \leftarrow \frac{3 \times 12}{7 \times 1}$$

$$5\frac{1}{7}$$

$$2\frac{1}{7} \times 2\frac{2}{5} = 5\frac{1}{7}$$

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

$$\frac{2}{3} \times \frac{21}{4}$$

$$\frac{1 \cancel{2}}{3} \times \frac{2 \cancel{1}^7}{4 \cancel{2}}$$

$$\frac{7 \leftarrow 1 \times 7}{2 \leftarrow 1 \times 2}$$

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

$$\frac{2}{3} \times 5\frac{1}{4} = 3\frac{1}{2}$$

Find each product.

- | | | | | |
|--|---|--|---|---|
| 1. $1\frac{1}{4} \times 2\frac{2}{3}$
_____ | 2. $2\frac{2}{5} \times 4\frac{1}{2}$
_____ | 3. $3\frac{1}{7} \times 2\frac{4}{5}$
_____ | 4. $\frac{1}{5} \times 2\frac{7}{9}$
_____ | 5. $12\frac{1}{2} \times 2\frac{2}{5}$
_____ |
| 6. $2\frac{1}{8} \times 2\frac{2}{3}$
_____ | 7. $5\frac{1}{3} \times 1\frac{7}{8}$
_____ | 8. $\frac{1}{2} \times 3\frac{3}{5}$
_____ | 9. $2\frac{1}{7} \times 4\frac{2}{3}$
_____ | 10. $1\frac{1}{2} \times 2\frac{6}{7}$
_____ |
| 11. $1\frac{5}{6} \times 2\frac{1}{4}$
_____ | 12. $5\frac{1}{4} \times 2\frac{2}{7}$
_____ | 13. $\frac{1}{4} \times 1\frac{3}{5}$
_____ | 14. $\frac{1}{7} \times 1\frac{3}{4}$
_____ | 15. $\frac{2}{9} \times 2\frac{1}{4}$
_____ |
| 16. $3\frac{1}{3} \times 3\frac{3}{10}$
_____ | 17. $1\frac{2}{3} \times 3\frac{1}{2}$
_____ | 18. $1\frac{2}{5} \times 4\frac{1}{3}$
_____ | 19. $\frac{1}{7} \times 1\frac{3}{5}$
_____ | 20. $\frac{3}{5} \times 8\frac{1}{2}$
_____ |
| 21. $3\frac{2}{5} \times 2\frac{1}{2}$
_____ | 22. $1\frac{2}{3} \times 7\frac{1}{2}$
_____ | 23. $1\frac{3}{10} \times 2\frac{6}{7}$
_____ | 24. $\frac{3}{16} \times 1\frac{1}{7}$
_____ | 25. $2\frac{6}{7} \times 1\frac{2}{5}$
_____ |

Solve.

26. Estimate the area of a window pane that has dimensions $6\frac{1}{8}$ by $11\frac{1}{4}$ inches.
27. A hamster is $2\frac{1}{2}$ inches long. A rabbit is $3\frac{1}{2}$ times as long as the hamster. How long is the rabbit?

Name _____

Writing Equations

Draw straight lines to match up the sentences and equations. Then write the missing equation in each set. The uncrossed letters will spell out a message.

1.



- | | | | |
|------------------------------------|---|----------|--------------------|
| Twelve is three more than x . | • | • | $12 = \frac{x}{2}$ |
| Twelve is half of x . | • | W | • $2x + 1 = 12$ |
| x decreased by two is twelve. | • | A | • $12 = x + 3$ |
| One more than twice x is twelve. | • | Y | • _____ |

2.

- | | | | |
|--|---|----------|----------------------|
| Eighteen is nine less than x . | • | • | $5 + x = 18$ |
| The product of nine and x is eighteen. | • | W | • $18 = x - 9$ |
| x divided five is eighteen. | • | R | • $\frac{x}{5} = 18$ |
| The sum of five and x is eighteen. | • | N | • _____ |

3.

- | | | | |
|---|---|----------|----------------|
| Twice x is thirty. | • | T | • $x = 30^2$ |
| The difference of x squared and thirty is five. | • | O | • $x = 30 + 5$ |
| x is five more than thirty. | • | N | • $2x = 30$ |
| x is thirty squared. | • | A | • _____ |

4.

- | | | | |
|---|---|-----------|-----------------|
| One number is seven times another number. | • | S | • $x^2 = y + 7$ |
| One number is seven less than another number. | • | G | • $x = y - 7$ |
| One number squared is seven more than another number. | • | T | • $x = 7y$ |
| Seven times one number is half of another number. | • | S! | • _____ |

5.

- | | | | |
|--|---|-----------|------------------|
| Six times a number is ten more than the number. | • | • | $63 + x = 10x$ |
| Double a number plus ten is six times the number. | • | I | • $63 = 3x$ |
| Sixty-three is three times a number. | • | E! | • $2x + 10 = 6x$ |
| Sixty-three increased by a number is ten times the number. | • | C! | • _____ |

Review 73

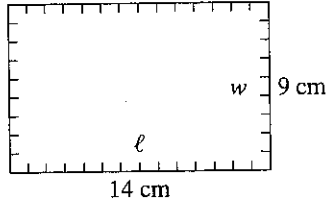
Perimeters and Areas of Rectangles

Perimeter

The *perimeter* of a figure is the sum of the lengths of its sides. Opposite sides of a rectangle are equal. To find the perimeter, add the 2 lengths (ℓ) and the 2 widths (w).

$$P = \ell + \ell + w + w \text{ or } P = 2\ell + 2w$$

Find the perimeter.



$$\begin{aligned} P &= 2\ell + 2w \\ &= 2(14) + 2(9) \\ &= 28 + 18 = 46 \end{aligned}$$

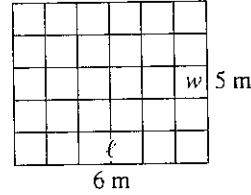
The perimeter is 46 centimeters.

Area

The *area* of a figure is the number of square units needed to cover the figure. To find the area of a rectangle, multiply the length (ℓ) and the width (w).

$$A = \ell \times w$$

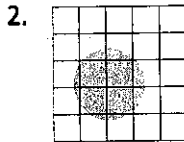
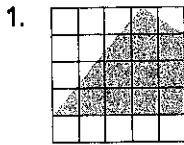
Find the area.



$$\begin{aligned} A &= \ell \times w \\ &= 6 \times 5 \\ &= 30 \end{aligned}$$

The area is 30 square meters.

Estimate the area of each figure. Each square represents 1 square inch.



Find the perimeter and area of each rectangle or square.

4. $\ell = 12 \text{ cm}, w = 2 \text{ cm}$

5. $\ell = 9 \text{ ft}, w = 7.5 \text{ ft}$

6. $\ell = 2.5 \text{ m}, w = 2.5 \text{ m}$

7. $\ell = 5.5 \text{ in.}, w = 5.5 \text{ in.}$

8. $\ell = 6.2 \text{ in.}, w = 3.4 \text{ in.}$

9. $\ell = 4.5 \text{ ft}, w = 0.75 \text{ ft}$

10. $\ell = 8 \text{ cm}, w = 8 \text{ cm}$

11. $\ell = 10.5 \text{ m}, w = 5.2 \text{ m}$

12. $\ell = 22 \text{ in.}, w = 9 \text{ in.}$

13. What is the area of a square with a perimeter of 60 meters?

Name _____

Equation Word Problems

Write an equation to match each problem, then solve the problem. When you are finished, find and circle the numeric part of your answer in the box at the bottom of the page.

Example The sum of four times a number and 12 is 72. What is the number?

$$4n + 12 = 72$$

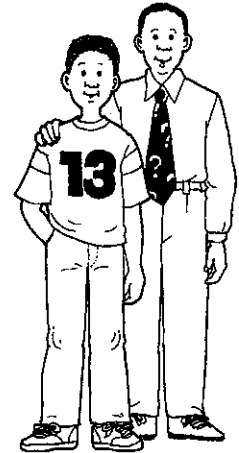
$$4n + 12 - 12 = 72 - 12$$

$$4n = 60$$

$$\frac{4n}{4} = \frac{60}{4}$$

$$n = 15$$

1. Max's age is 2 more than his father's age divided by 4. Max is 13 years old. How old is his dad?
2. Tanya is 1 year less than three times the age of her sister Jessica. Jessica is five years old. How old is Tanya?
3. The Zigzag River is 114 miles longer than twice the Petite River. If the Petite River is 46 miles long, how long is the Zigzag River?
4. A used CD is a dollar more than one-third the price of a new CD. If a new CD costs \$18, how much is a used CD?



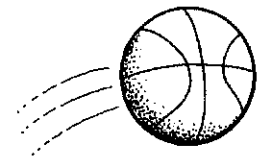
5. Sixth graders have an average of 60 minutes of homework, four days a week. Seventh graders have 20 minutes more per day than sixth graders. How many minutes per week of homework does a seventh grader have?

6. An Internet bookseller charges \$6 per paperback book plus a \$3 shipping and handling fee per order. If Mr. Montoya spent \$111 on books for his class, how many books did he buy?



7. The number of adults at the middle school dance is equal to the number of students divided by 8. If there are 26 adults at the dance, how many students are there?

8. The basketball team finished its season with 12 wins. It won twice as many games as it lost. How many games did it play in all?



9. The rec center has two payment choices. Plan A is \$35 per month for unlimited visits. Plan B is \$15 per month plus \$2 per visit. If Nicole will go to the rec center 8 times a month, which is the cheaper plan for her? How much will it cost?

7 1 4 2 0 8 3 1 3 2 0 4 4 1 8 1 5 2 0 6 1 8