

Dear Rising Grade 6, Grade 7, and Grade 8 Parents,

We hope this letter finds you well. As we approach the summer months, we wanted to touch base regarding your child's summer work. This work has been assigned to ensure that they maintain their academic progress over the summer break and are prepared for the upcoming school year.

Your child's summer work will consist of a reading choice board with subject-specific tasks and math summer work packet. It is important that they complete this work to the best of their ability and submit it on time. This will help them to stay on track and be well-prepared for the challenges of the next school year.

Returning students will continue to have access to **Clever** through the month of July to access *iReady*. Please see the enclosed Frequently Asked Questions (FAQ) Sheet to access *iReady*. The Diocesan Personalized Learning team can help you troubleshoot issues with **Clever** and *iReady* through the summer while teachers are on break. Please email the Personalized Learning Team (PersonalizedLearningTeam@diobpt.org) with any questions. Our new St. Mark students will be introduced to **Clever** and *iReady* in September.

If you have any questions regarding your child's reading choice board or math review packet, please do not hesitate to reach out to Mrs. Mannino (cmannino@stmarkschool.org). We are here to support your child's academic success and will be happy to provide any assistance or clarification that is needed.

Thank you for your ongoing support and partnership in your child's education.

Best regards,

St. Mark School Teachers

St. Mark School
Students Entering Grades 1 through 8
Summer Work

i-Ready

Students are strongly encouraged to continue on his or her i-Ready Learning Path for Reading and Math. Students can progress on each content area for at least 30 minutes per week. Students rising to Grade 1 & Grade 2 can log-on to i-Ready using his or her Clever Badge. Students rising to Grades 3 through 8 can log-on to i-Ready by using her or her Google account username and password. Current students will have access to i-Ready this summer, through July 31st.

The website address is: www.clever.com/in/diobpt

Reading and Math Choice Boards

Students are encouraged to complete all and/or some of the summer Reading and Math choice board activities. Choice boards do not need to be completed to its entirety. Students should turn in whatever they have completed. Students entering Grades 6 through 8 are provided with a Math skills review packet and a Reading choice board. Choice boards and Math skills review packets are due to your child's classroom teacher by Friday, September 4th.

Name: _____ Summer Reading Choice Board

For Students Entering Grades 5-8: Below is a grid of reading activities for you to complete over the summer so that you can continue to practice what you learned last year in school. As you finish the activity, write down the title of the book that you have read in the box. If you need more room to complete the activity use another paper and attach to this packet. If you are reading a chapter book, you can write in multiple boxes. Returning students will have access to iReady in June and July to continue working on your learning path. Return the form to your teacher by Friday, September 4th. There is no minimum number of squares to complete, just complete as much as you can!

JUNE 2026

Read a chapter in your book and rename the title. Title: Renamed:	Read a book with a Catholic theme. Title:	Read a book from a genre you normally don't read. Title:	Read to a sibling or a friend. Title:	Read an award winning book. Title:
Read an article/book about a historical event. Title:	Read a book by an author you've never read before. Title:	Read on a rainy day. Title:	Read a biography about someone who inspires you. Title:	Read a book with a number in the title. Title:
Borrow a book from the local library. Title:	How does the book you're reading connect to your life?	What are 3 connections you have to the main character in your book?	Read a graphic novel. Title:	Create a comic strip about a chapter you're reading. Include at least 6 boxes.
Listen to an audiobook. Title:	Reread a book you loved. Title:	Read a book recommended by a friend. Title:	Read a cookbook and make a recipe with your family. Title & Recipe:	Read a poem and complete a rhyme scheme pattern. Title:
Read a scripture passage from the Bible. Record the Biblical citation-specify the book, chapter, and verse number of the passage:	Find a quote/element of literature in the book and make a poster explaining why you chose it. Title:	Draw a new book cover for a book you read. Attach to paper.	If you could change the ending of the book you read, how would you change it? Title:	Read a book at the beach or the pool. Title:



Math Summer Work Packet

for Students Entering

GRADE 6

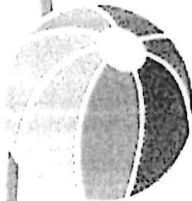
This Packet Belongs To:





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A Note from the Math Teacher

Dear Future Math Student & Parents/Guardians,

Enjoy your Summer! The attached packet provides a range of activities that review and expand on the math concepts your child has learned. It is designed to be worked for 15 to 30 minutes a day throughout the summer rather than completed in just a few days at the beginning or end of summer. The goal is to keep skills sharp to be ready to move forward into the next school year. I have provided answers in the back for the parents and ask that you review the work with your child as it is completed.

Work hard a little bit of the time to keep up those math skills...at the same time...have fun a lot of the time to give yourself a break!

**Yours in Christ,
Mr. Patrick Fallon, M.Ed.**



"MATH IS A JOURNEY, NOT A DESTINATION"

Name _____

Adding and Subtracting Decimals

Find $1.7 + 2.45$.

Find $36.57 - 4.6$.

<p><i>Line up the decimal points.</i></p> $\begin{array}{r} \downarrow \\ 1.7 \\ + 2.45 \\ \hline \end{array}$ $\begin{array}{r} 1 \\ 1.70 \leftarrow \text{Write zeros to} \\ + 2.45 \quad \text{show place value.} \\ \hline 4.15 \\ \uparrow \text{Place decimal point} \\ \text{in answer.} \end{array}$	<p><i>Line up the decimal points.</i></p> $\begin{array}{r} \downarrow \\ 36.57 \\ - 4.6 \\ \hline \end{array}$ $\begin{array}{r} 5 \quad 15 \\ 36.57 \\ - 4.60 \leftarrow \text{Write zeros to} \\ \hline 31.97 \quad \text{show place value.} \\ \uparrow \text{Place decimal point} \\ \text{in answer.} \end{array}$
--	--

Find each sum or difference.

1.
$$\begin{array}{r} \downarrow \\ 2.65 \\ + 13.30 \\ \hline \end{array}$$

2.
$$\begin{array}{r} \downarrow \\ 14.10 \\ - 3.05 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 744 \\ + 36.2 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 9 \\ - 0.6 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 8.97 \\ + 66 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 100 \\ - 0.22 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6.8 \\ + 237.29 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 0.5 \\ - 0.23 \\ \hline \end{array}$$

9. $15.4 - 8 = \underline{\hspace{2cm}}$

10. $3 - 2.54 = \underline{\hspace{2cm}}$

11. $1.34 + 4.1 = \underline{\hspace{2cm}}$

12. $133.01 - 5.6 = \underline{\hspace{2cm}}$

13. $448 + 1.75 + 80.3 = \underline{\hspace{2cm}}$

14. $12.3 + 0.61 + 100 = \underline{\hspace{2cm}}$

15. On the 3-days of their vacation, the Davis family traveled 417 mi, 45.3 mi, and 366.9 mi. How far did they travel all together?

16. Etta bought a calculator for \$15. Glenn found the same model for \$9.79. How much more did Etta pay than Glenn did?

Name _____

Review

4

Multiplying with Decimals

Find 4.3×2.7 .

Multiply as you would with whole numbers.

$$\begin{array}{r} 2 \\ 4.3 \\ \times 2.7 \\ \hline 301 \\ 860 \\ \hline 1161 \end{array}$$

Count the number of decimal places in both factors. The total is the number of decimal places in the product.

$$\begin{array}{r} 4.3 \quad \leftarrow \quad 1 \text{ decimal place} \\ \times 2.7 \quad \leftarrow \quad + 1 \text{ decimal place} \\ \hline 11.61 \quad \leftarrow \quad 2 \text{ decimal places} \end{array}$$

Find each product.

1. $\begin{array}{r} 14 \\ \times 8.8 \\ \hline 112 \\ 1120 \end{array}$

2. $\begin{array}{r} 1.6 \\ \times .9 \end{array}$

3. $\begin{array}{r} 0.4 \\ \times 3.2 \end{array}$

4. $\begin{array}{r} 0.05 \\ \times 0.3 \end{array}$

5. $\begin{array}{r} 2.15 \\ \times 8.3 \end{array}$

6. $\begin{array}{r} 3.3 \\ \times 0.12 \end{array}$

7. $\begin{array}{r} 0.51 \\ \times 4.2 \end{array}$

8. $\begin{array}{r} 1.35 \\ \times 13 \end{array}$

9. $23 \times 0.47 = \underline{\hspace{2cm}}$

10. $0.9 \times 5 = \underline{\hspace{2cm}}$

11. $168 \times 2.25 = \underline{\hspace{2cm}}$

12. $0.8 \times 0.11 = \underline{\hspace{2cm}}$

13. $20 \times 20.2 = \underline{\hspace{2cm}}$

14. $4.9 \times 0.3 = \underline{\hspace{2cm}}$

15. A roll of paper towels contained 250 sheets. Each sheet was 8.75 inches long. How long was the roll? _____

16. Tania bought 3 new sweaters. Each sold for \$19.99. How much did she spend? _____

Name _____

Review
6

Dividing with Decimals

Find $36.8 \div 16$.

$\begin{array}{r} \downarrow \\ 16 \overline{)36.8} \\ \underline{32} \\ 48 \\ \underline{48} \\ 0 \end{array}$ <p>Place the decimal point. ← Think: $20 \overline{)40}$ Try 2 in the quotient.</p>	$\begin{array}{r} 2.3 \\ 16 \overline{)36.8} \\ \underline{-32} \\ 48 \\ \underline{-48} \\ 0 \end{array}$ <p>Multiply 2×16. Subtract. Bring down 8. Multiply 3×16. Subtract.</p>
--	---

Find each quotient.

$$1. \begin{array}{r} 2. \\ 6 \overline{)13.8} \\ \underline{-12} \\ \\ \underline{- } \\ \\ \underline{- } \\ \\ \end{array}$$

2. $6 \overline{)131.4}$

3. $9 \overline{)141.9}$

4. $5 \overline{)388.5}$

5. $7 \overline{)669.2}$

6. $28 \overline{)263.2}$

7. $41 \overline{)274.7}$

8. $7 \overline{)34.23}$

9. $269.12 \div 8 =$ _____

10. $311.56 \div 4 =$ _____

11. $2,229.62 \div 46 =$ _____

12. $1,449.09 \div 81 =$ _____

13. A photographer bought 36 rolls of film for \$136.44. What was the price of one roll?

14. Four students each ran 100 m in a 400-m relay race. The team's total time was 49.44 sec. Find the average time of each runner.

Name _____

Review

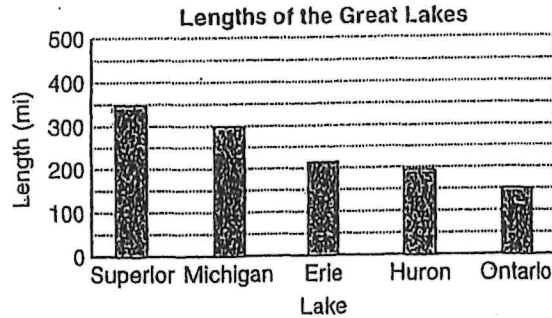
8

Interpreting Data

The **bar graph** shows the lengths in miles of the Great Lakes. Lengths of bars represent lengths of lakes.

Which is the shortest Great Lake?

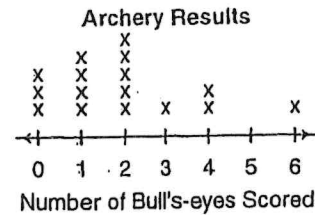
The shortest lake is Lake Ontario.



Use the graphs to answer each question.

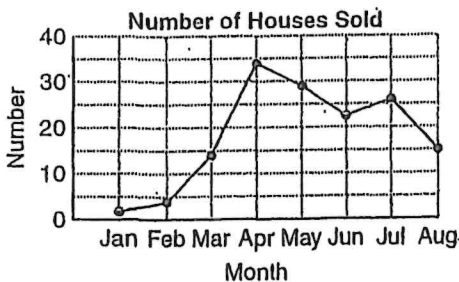
1. How many archers scored 4 bull's eyes?

2. What was the most common number of bull's-eyes scored?



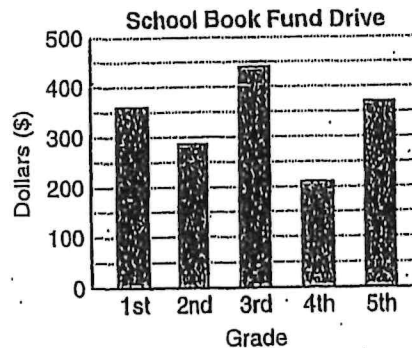
3. In which month were the most houses sold?

4. In which month were about the same number sold as were sold in August?



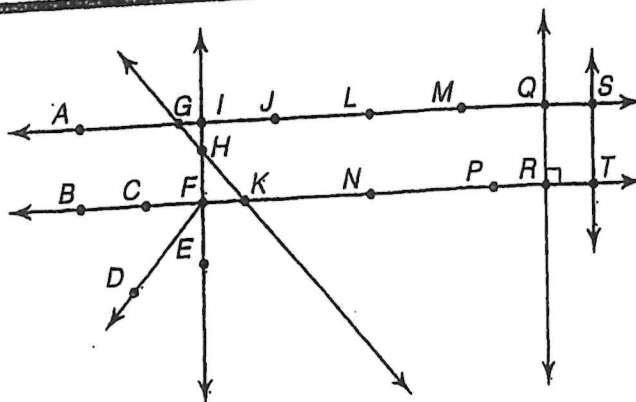
5. Which grades raised about the same amount for the school book drive?

6. The school's goal was to raise \$1,500. About how much did they raise in all?



Geometric Ideas

- A **line** is a straight path of points that goes on forever in two directions. Examples: \overleftrightarrow{AS} , \overleftrightarrow{GK} .
- A **ray** is a part of a line with one endpoint, extending forever in only one direction. Examples: \overrightarrow{FD} , \overrightarrow{FB} .
- A **line segment** is part of a line with two endpoints. Examples: \overline{CF} , \overline{MQ} .
- A **midpoint** is the point halfway between the endpoints of a line segment. Example: Point L is halfway between points J and M on \overline{JM} .
- **Congruent line segments** are line segments that have the same length. Example: \overline{QR} is congruent to \overline{ST} .
- **Parallel lines** are in the same plane but do not intersect. Example: \overleftrightarrow{AS} is parallel to \overleftrightarrow{BT} .



Use the diagram at the right. Name the following.

- three line segments

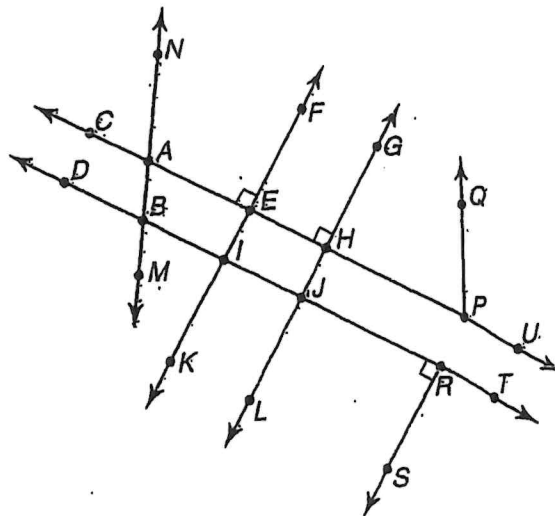
- two parallel lines

- two lines that intersect \overleftrightarrow{DT}

- two congruent line segments

- two lines perpendicular to \overleftrightarrow{BR}

- two midpoints of line segments



Name _____

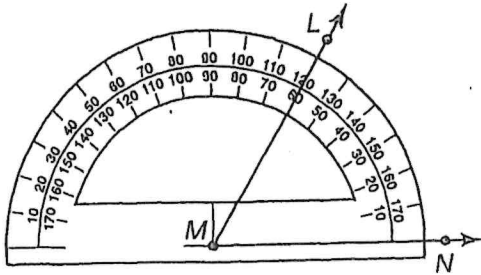
Measuring and Drawing Angles

R 9-2

How to measure an angle:

Step 1 Place the protractor's center on the angle's vertex.

Step 2 Place the 0° mark on one side of the angle.



$$\angle LMN = 60^\circ$$

Step 3 Use the scale beginning with the 0° mark to read the measurement where the other side of the angle crosses the protractor.

How to draw an angle:

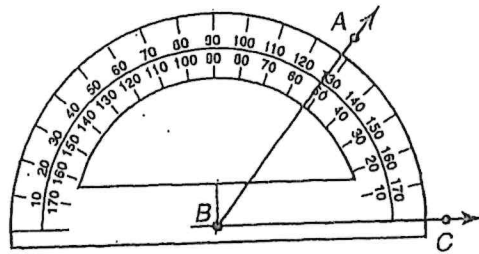
Draw an angle of 52°.

Step 1 Draw a ray.

Step 2 Place the protractor's center on the endpoint. Line up the ray with the 0° mark.

Step 3 Using the scale with the 0° mark, place a point at 52°.

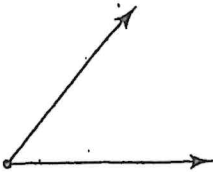
Step 4 Draw the other ray.



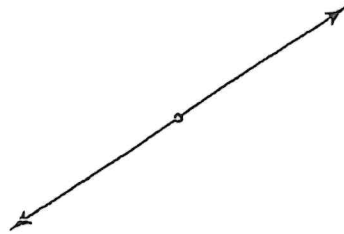
$$\angle ABC = 52^\circ$$

Classify each angle as acute, right, obtuse, or straight. Then measure the angle.

1.



2.



Draw an angle with each measure.

3. 45°

4. 120°



Name _____

**Review
10**

Adding and Subtracting Fractions

Find $\frac{2}{3} + \frac{1}{6}$.

Find $\frac{1}{4} - \frac{1}{5}$.

<table border="1" style="display: inline-table; margin-right: 10px;"> <tr><td>3</td><td>6</td><td>9</td><td>12</td><td>15</td></tr> <tr><td>6</td><td>12</td><td>18</td><td>24</td><td>30</td></tr> </table> <p>Multiples of 3 Multiples of 6</p> <p>The least common denominator is 6.</p> <p>Write equivalent fractions. $\frac{2}{3} = \frac{4}{6}$</p> <p>Add. $\frac{1}{6} = \frac{1}{6}$</p> $\begin{array}{r} \frac{4}{6} \\ + \frac{1}{6} \\ \hline \frac{5}{6} \end{array}$	3	6	9	12	15	6	12	18	24	30	<table border="1" style="display: inline-table; margin-right: 10px;"> <tr><td>4</td><td>8</td><td>12</td><td>16</td><td>20</td></tr> <tr><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td></tr> </table> <p>Multiples of 4 Multiples of 5</p> <p>The least common denominator is 20.</p> <p>Write equivalent fractions. $\frac{1}{4} = \frac{5}{20}$</p> <p>Subtract. $\frac{1}{5} = \frac{4}{20}$</p> $\begin{array}{r} \frac{5}{20} \\ - \frac{4}{20} \\ \hline \frac{1}{20} \end{array}$	4	8	12	16	20	5	10	15	20	25
3	6	9	12	15																	
6	12	18	24	30																	
4	8	12	16	20																	
5	10	15	20	25																	

Find each sum or difference.

1. $\frac{1}{4} + \frac{2}{3} =$ _____

4			
3			

2. $\frac{11}{12} - \frac{5}{6} =$ _____

12			
6			

3. $\frac{1}{3} + \frac{4}{9} =$ _____

4. $\frac{3}{7} + \frac{2}{7} =$ _____

5. $\frac{11}{12} - \frac{5}{12} =$ _____

6. $\frac{1}{2} + \frac{1}{3} =$ _____

7. $\frac{1}{3} - \frac{1}{5} =$ _____

8. $\frac{3}{8} - \frac{1}{6} =$ _____

9. $\frac{3}{5} + \frac{3}{10} =$ _____

10. $\frac{1}{2} + \frac{2}{5} =$ _____

11. $\frac{2}{3} - \frac{1}{4} =$ _____

12. Meg practiced the piano for $\frac{5}{12}$ hr. She did homework for $\frac{3}{4}$ hr. How much longer did she do homework than she practiced the piano?



Adding Mixed Numbers

To add mixed numbers, you can add the fractional parts to the whole number parts, and then simplify.

Find $2\frac{2}{4} + 3\frac{1}{4}$.

The fractions have a common denominator. Add the fractions. Then add the whole numbers.

$$\begin{array}{r} 2\frac{2}{4} \\ + 3\frac{1}{4} \\ \hline 5\frac{3}{4} \end{array}$$

Find $3\frac{2}{3} + 4\frac{1}{9}$.

Write equivalent fractions with the LCD.

$$\begin{array}{r} 3\frac{2}{3} = 3\frac{6}{9} \\ + 4\frac{1}{9} = 4\frac{1}{9} \\ \hline \end{array}$$

Add the whole numbers. Add the fractions. Simplify if possible.

$$\begin{array}{r} 3\frac{6}{9} \\ + 4\frac{1}{9} \\ \hline 7\frac{7}{9} \end{array}$$

Find $4 + 3\frac{3}{5}$.

Add the whole numbers; then add the fraction.

$$\begin{array}{r} 4 \\ + 3\frac{3}{5} \\ \hline 7\frac{3}{5} \end{array}$$

Find each sum. Simplify your answer.

1. $2\frac{1}{5} + 2\frac{3}{5} =$ _____

2. $4\frac{2}{3} + 1\frac{1}{6} =$ _____

3. $5\frac{3}{5} + \frac{3}{10} =$ _____

4. $8\frac{5}{8} + 1\frac{5}{12} =$ _____

5. $6\frac{1}{4} + 11\frac{3}{8} =$ _____

6. $7 + 8\frac{1}{3} =$ _____

7. In 2001, the men's indoor pole vault record was $20\frac{1}{6}$ ft. The women's record for the indoor pole vault was $15\frac{5}{12}$ ft. What is the combined height of the two records? _____

8. **Writing in Math** How high is a stack of library books if one book is $1\frac{3}{8}$ in. high, the second book is $1\frac{5}{6}$ in. high, and the third is $2\frac{1}{3}$ in. high? Explain how you solved this problem.

Name _____

Review
12

Subtracting Mixed Numbers

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

<p><i>Write equivalent fractions.</i></p> $3\frac{2}{3} = 3\frac{4}{6}$ $\underline{- 2\frac{1}{6} = 2\frac{1}{6}}$ <p>The LCD of 3 and 6 is 6.</p>	<p><i>Subtract the fractions.</i></p> $3\frac{2}{3} = 3\frac{4}{6}$ $\underline{- 2\frac{1}{6} = 2\frac{1}{6}}$ $1\frac{3}{6} = 1\frac{1}{2}$	<p><i>Subtract the whole numbers. Simplify.</i></p> $3\frac{2}{3} = 3\frac{4}{6}$ $\underline{- 2\frac{1}{6} = 2\frac{1}{6}}$ $1\frac{3}{6} = 1\frac{1}{2}$
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Find each difference. Simplify.

1. $3\frac{1}{3} = 3\frac{5}{15}$
 $\underline{- 2\frac{1}{5} = 2\frac{3}{15}}$

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

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

4. $6\frac{5}{8}$
 $\underline{- 2\frac{1}{8}}$

5. $3\frac{7}{10}$
 $\underline{- 1\frac{2}{5}}$

6. $7\frac{7}{8}$
 $\underline{- 2\frac{3}{4}}$

7. $3\frac{3}{4}$
 $\underline{- 2\frac{1}{6}}$

8. $5\frac{5}{6}$
 $\underline{- 1\frac{1}{8}}$

9. $2\frac{2}{3} - 1\frac{1}{4} = \underline{\hspace{2cm}}$

10. $4\frac{3}{4} - 4\frac{2}{5} = \underline{\hspace{2cm}}$

11. $2\frac{1}{3} - 1\frac{2}{3} = \underline{\hspace{2cm}}$

12. $4\frac{4}{9} - 3\frac{2}{3} = \underline{\hspace{2cm}}$

13. $3\frac{3}{8} - 2\frac{5}{6} = \underline{\hspace{2cm}}$

14. $5\frac{1}{3} - 2\frac{5}{8} = \underline{\hspace{2cm}}$

15. Greg found two rocks for his collection. One weighed $4\frac{1}{4}$ lb and the other weighed $2\frac{7}{8}$ lb. Find the difference in weights. _____

Name _____

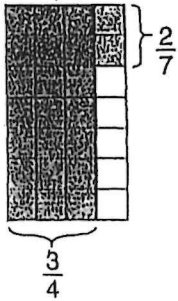
R 5-2

Multiplying Fractions

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

One Way

Draw a picture. Simplify if possible.



6 of the 28 squares have overlapping shading.

So, $\frac{3}{4} \times \frac{2}{7} = \frac{6}{28}$.

Simplify $\frac{6}{28}$ to $\frac{3}{14}$.

Another Way

Multiply the numerators and denominators. Simplify if possible.

$$\begin{aligned} & \frac{3}{4} \times \frac{2}{7} \\ &= \frac{3 \times 2}{4 \times 7} = \frac{6}{28} \\ &= \frac{3}{14} \end{aligned}$$

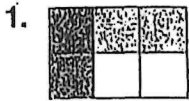
Simplify First

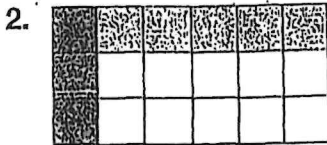
Find the GCF of any numerator and any denominator.

The GCF of 2 and 4 is 2. Divide 2 and 4 by the GCF.

$$\frac{\cancel{3}}{\cancel{4}^2} \times \frac{\cancel{2}^1}{7} = \frac{3}{14}$$

Write an equation for each picture.





Find each product. Simplify if possible.

3. $\frac{6}{8} \times \frac{1}{3} =$ _____

4. $\frac{5}{6} \times \frac{7}{10} =$ _____

5. $\frac{4}{5} \times \frac{3}{8} =$ _____

6. $\frac{1}{2} \times \frac{4}{9} =$ _____

7. **Number Sense** Can you simplify before multiplying $14 \times \frac{25}{27}$? Explain.

Name _____

Multiplying Mixed Numbers

R 5-4

How to find the product of two mixed numbers:

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

Step 1

Estimate by rounding.

$$\begin{array}{r} 3\frac{2}{3} \times 4\frac{1}{2} \\ \downarrow \quad \downarrow \\ 4 \times 5 = 20 \end{array}$$

Then write each mixed number as an improper fraction.

$$\begin{array}{r} 3\frac{2}{3} \times 4\frac{1}{2} \\ \downarrow \quad \downarrow \\ \frac{11}{3} \times \frac{9}{2} \end{array}$$

Step 2

Look for common factors and simplify.

$$\frac{11}{\cancel{3}} \times \frac{\cancel{9}^3}{2} = \frac{11}{1} \times \frac{3}{2}$$

Step 3

Multiply. Write the product as a mixed number.

$$\frac{11}{1} \times \frac{3}{2} = \frac{33}{2} = 16\frac{1}{2}$$

$16\frac{1}{2}$ is close to 20, so the answer is reasonable.

Find each product. Simplify if possible.

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

2. $2\frac{1}{5} \times 2\frac{2}{3} =$ _____

3. $6 \times 3\frac{1}{4} =$ _____

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

5. $4\frac{1}{2} \times 16 =$ _____

6. $1\frac{3}{8} \times 2\frac{1}{2} =$ _____

7. **Number Sense** Is $2 \times 17\frac{5}{8}$ greater than or less than 36? Explain.

11

Name _____

Review
14

Problem Solving: Strategies

A computer store has 25 printers and computers. There are 7 more printers than computers. How many of each are there?

	Printers	Computers	Check
Guess 1	20	5	$20 - 5 = 1$
Guess 2	14	11	$14 - 11 = 3$
Guess 3	16	9	$16 - 9 = 7$ ✓

Solution: There are 16 printers and 9 computers.

Problem Solving Strategies

- Act It Out
- Draw a Picture
- Look For a Pattern
- **Try, Check, and Revise**
- Make an Organized List
- Make a Table
- Solve a Simpler Problem.
- Work Backward

Use any strategy to solve.

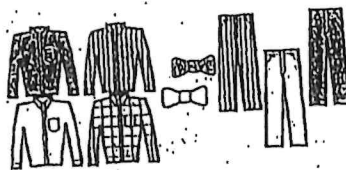
1. At the veterinarian's office, Terri learned that her dog weighed 4 times as much as her cat. Together the pets weighed 40 lbs. How much did the dog weigh?

2. Yasmin arrived home from play practice at 4:25 P.M. The walk home took 15 minutes. Practice began 20 minutes after the final bell and lasted for a half hour. When did school end?

3. Vanessa, Diego, Rose and Randy stood in line for lunch. Rose was just behind Vanessa. Diego was not next to Rose or Randy. Write the line order.

4. Students played dodge ball and volleyball for 45 minutes. They played dodge ball for 11 more minutes than they played volleyball. How long did they play dodge ball?

5. Mr. Jones has 4 shirts, 2 ties, and 3 pair of pants. How many days in a row can he wear a different outfit?



Name _____

R 10-1

Customary Measurement

Units of Length

foot (ft) 1 ft = 12 in.
yard (yd) 1 yd = 3 ft
 1 yd = 36 in.
mile (mi) 1 mi = 5,280 ft
 1 mi = 1,760 yd

Units of Capacity

cup (c) 1 c = 8 fluid ounces (oz)
pint (pt) 1 pt = 2 c
quart (qt) 1 qt = 2 pt
gallon (gal) 1 gal = 4 qt

How to change from one unit of measurement to another:

To change from larger units to smaller units in the customary system, you have to multiply.

120 yd = _____ ft
1 yd = 3 ft
 $120 \times 3 \text{ ft} = 360 \text{ ft}$
120 yd = 360 ft

To change from smaller units to larger ones, you have to divide.

256 oz = _____ c
1 c = 8 oz
 $256 \div 8 = 32$
256 oz = 32 c

Complete.

- 36 in. = _____ ft
 - 4 qt = _____ c
 - 5 lb = _____ oz
 - 39 ft = _____ yd
 - 1.5 mi = _____ ft
 - 3.5 gal = _____ qt
 - 2 T = _____ lb
 - 16 pt = _____ qt
 - 64 oz = _____ lb
 - 3 yd = _____ in.
 - 4 gal = _____ pt
 - 55 yd = _____ ft
 - 6.5 lb = _____ oz
 - 20 pt = _____ gal
 - 4.5 qt = _____ c
 - 205 yd = _____ ft
17. Reasoning A vendor at a festival sells soup for \$1.25 per cup or \$3.75 per quart. Which is the better buy?

13

Name _____

Metric Measurement

R 10-2

Changing from one metric unit to another:

To change from a larger unit to a smaller unit, multiply by a power of ten.

$$3.8 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$$

A liter is a larger unit than a milliliter. To change from liters to milliliters, multiply.

$$1 \text{ L} = 1,000 \text{ mL}$$

$$3.8 \times 1,000 = 3,800$$

$$3.8 \text{ L} = 3,800 \text{ mL}$$

To change from a smaller unit to a larger unit, divide by a power of ten.

$$100 \text{ m} = \underline{\hspace{2cm}} \text{ km}$$

The meter is a smaller unit than the kilometer. To change from meters to kilometers, divide.

$$1,000 \text{ m} = 1 \text{ km}$$

$$100 \div 1000 = 0.1$$

$$100 \text{ m} = 0.1 \text{ km}$$

Name the most appropriate metric unit for each measurement.

1. mass of a cow 2. length of a carrot 3. capacity of a thimble

Complete.

4. $45 \text{ g} = \underline{\hspace{2cm}} \text{ mg}$ 5. $3450 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$
6. $4.5 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$ 7. $1.68 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$
8. $28 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$ 9. $7,658 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$
10. $600 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$ 11. $5,000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$
12. $5.1 \text{ km} = \underline{\hspace{2cm}} \text{ m}$ 13. $1.780 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$
14. $0.780 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$ 15. $4,300 \text{ m} = \underline{\hspace{2cm}} \text{ km}$
16. $9,000 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$ 17. $8,000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

18. **Reasoning** It is recommended that people have 1 g of calcium each day. How many milligrams of calcium is that?

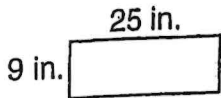


Name _____

Perimeter

Perimeter is the distance around a shape.

You can add the lengths of all the sides or you can multiply the sum of the length and the width by 2 to find the perimeter of a rectangle.



$$p = 25 \text{ in.} + 9 \text{ in.} + 25 \text{ in.} + 9 \text{ in.} = 68 \text{ in.}$$

$$\text{or } p = 2 \times (25 \text{ in.} + 9 \text{ in.}) = 68 \text{ in.}$$

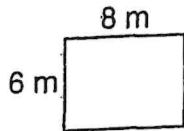
If only one side of a figure is given, then all sides have the same length.



$$p = 5 \text{ cm} + 5 \text{ cm} + 5 \text{ cm} + 5 \text{ cm} = 20 \text{ cm}$$

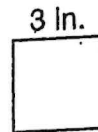
$$\text{or } p = 4 \times 5 \text{ cm} = 20 \text{ cm}$$

1. Find the perimeter of the rectangle.



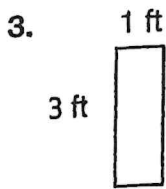
$$p = _ + _ + _ + _ = _ \text{ m}$$

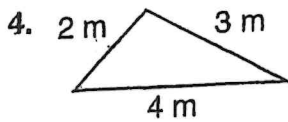
2. Find the perimeter of the square.

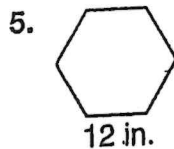


$$p = _ \times _ = _ \text{ in.}$$

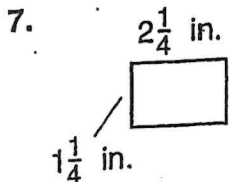
Find the perimeter of each figure.

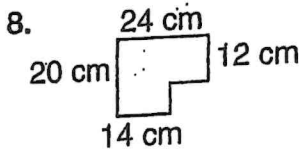


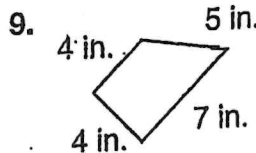


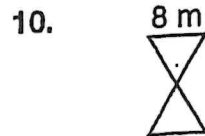












11. A flower garden is in the shape of an equilateral triangle. Each side measures $15\frac{3}{8}$ ft. What is the garden's perimeter?

15

Name _____

R 10-8

Area of Squares and Rectangles

You can use formulas to find the area of a square or rectangle.

Find the area of a square that is 7.2 m on each side.

Use the formula $A = s^2$.

$$A = (7.2)^2$$

$$A = 51.84$$

The area is 51.84 m².

Find the area of a rectangle with a length (l) of 4 cm and a width (w) of 12 cm.

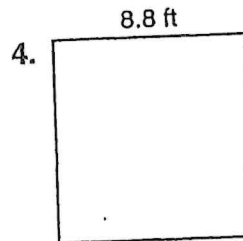
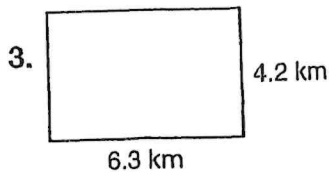
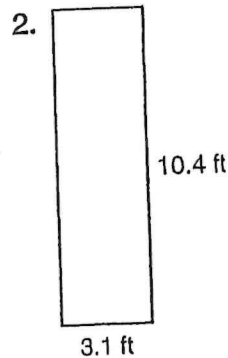
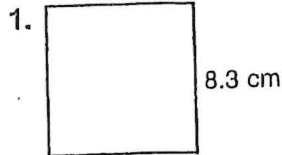
Use the formula $A = l \times w$.

$$A = 4 \times 12$$

$$A = 48$$

The area is 48 cm².

Find the area of each figure.



5. **Reasoning** What is the length of a rectangle that has an area of 120 ft² and a width of 8 ft?

6. **Number Sense** What is the area of a square that is 12.4 cm on each side?

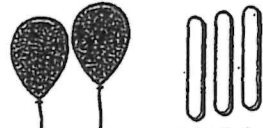
16

Name _____

**Review
18**

Ratio and Proportion

You can use **ratios** to compare two quantities.



2 balloons to 3 sticks


You can write ratios as:

words 2 to 3

with a colon 2:3

as a fraction $\frac{2}{3}$

A statement that two ratios are equal is called a **proportion**.



$\frac{1 \text{ balloon}}{2 \text{ sticks}} = \frac{2 \text{ balloons}}{4 \text{ sticks}}$

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

$\frac{1}{2} = \frac{2}{4}$ is a proportion.

Write each ratio. Use words, a colon, or a fraction.

1. Write the ratio of squares to circles.



2. The Computer Club has 20 girls and 15 boys. Write the ratio of girls to boys in the club.

Tell if the ratios form a proportion. Write yes or no.

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

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

5. $\frac{3}{5} \frac{6}{10}$ _____

6. $\frac{4}{6} \frac{8}{18}$ _____

Complete each table so that all ratios are equal.

7.

3	6	9	12
5			

8.

2			
7	21	42	63

9.

4		20	
5	10		50

10. The ratio of the width to the length of a painting is 3 to 7. If the painting is 42 in. long, how wide is it?

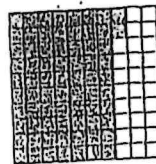
11. The ratio of the number of moons the planet Neptune has to the number that Saturn has is 4 to 9. Saturn has 18 moons. How many moons does Neptune have?

Name _____

R 7-2

Fractions, Decimals, and Percents

Fractions, decimals, and percents all name parts of a whole. The grid to the right has 72 out of 100 squares shaded.



72 out of 100 are shaded. As a fraction, that is $\frac{72}{100}$.
As a decimal, that is 0.72. As a percent, that is 72%.

Write 40% as a fraction and decimal.

$$40\% = \frac{40}{100} = 0.40$$

The decimal point moves two places to the left.

Write 0.47 as a fraction and percent.

$$0.47 = \frac{47}{100} = 47\%$$

Write 0.3% as a fraction and decimal.

$$0.3\% = \frac{0.3}{100} = 0.003$$

The decimal point moves two places to the left. Fill in any spaces with zeros.

Write $\frac{3}{4}$ as a decimal and percent.

You can use a proportion:

$$\frac{3}{4} = \frac{n}{100}$$

$$\frac{4n}{4} = \frac{300}{4}$$

$$n = 75$$

$$\text{So, } \frac{3}{4} = 0.75 = 75\%.$$

Write each in two other ways.

1. $\frac{2}{10}$ _____; _____

2. $\frac{23}{100}$ _____; _____

3. $\frac{7}{10}$ _____; _____

4. 97% _____; _____

5. 16% _____; _____

6. 52% _____; _____

7. 0.04 _____; _____

8. 0.35 _____; _____

9. **Number Sense** Sheila got 87% of the problem correct.
Patrick got $\frac{91}{100}$ correct. Who scored higher?

Name _____

Probability

What is the probability of spinning an A?

$\frac{2}{4}$ ← number of As
 $\frac{4}{4}$ ← total possible outcomes

The probability is $\frac{2}{4}$ or $\frac{1}{2}$.



What is the probability of spinning a B?

$\frac{1}{4}$ ← number of Bs
 $\frac{4}{4}$ ← total possible outcomes

The probability is $\frac{1}{4}$.

Complete.

1. What is the probability of spinning a 1?

← number of 1s
 ← total possible outcomes

The probability is _____.



2. What is the probability of spinning a 3?

← number of 3s
 ← total possible outcomes

The probability is _____.

Give the probability of each outcome.



3. spinning an N _____

4. spinning an S _____

5. spinning an S or G _____

6. spinning an S, G, or N _____

A number cube has 6 sides numbered 1, 2, 3, 4, 5, and 6. Find each probability.

7. rolling a 3 _____

8. rolling an even number _____

9. rolling 3, 4, 5, or 6 _____

10. rolling anything but 1 _____

11. A hat contains 26 cards, each printed with a different letter of the alphabet. What is the probability that you will pick a vowel (A, E, I, O, U, or Y)?

12. There are 6 blue socks, 7 white socks, and 8 gray socks in a drawer. If you pick a sock without looking, what is the probability that it will be blue?
