



## Math in the Work World

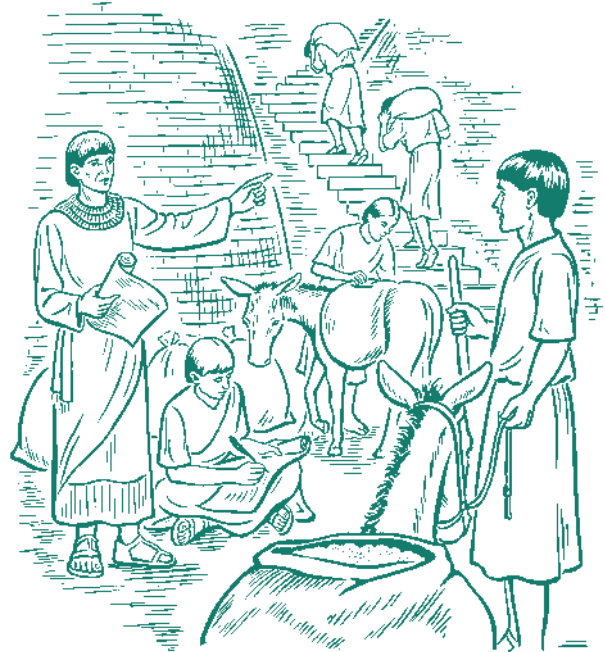
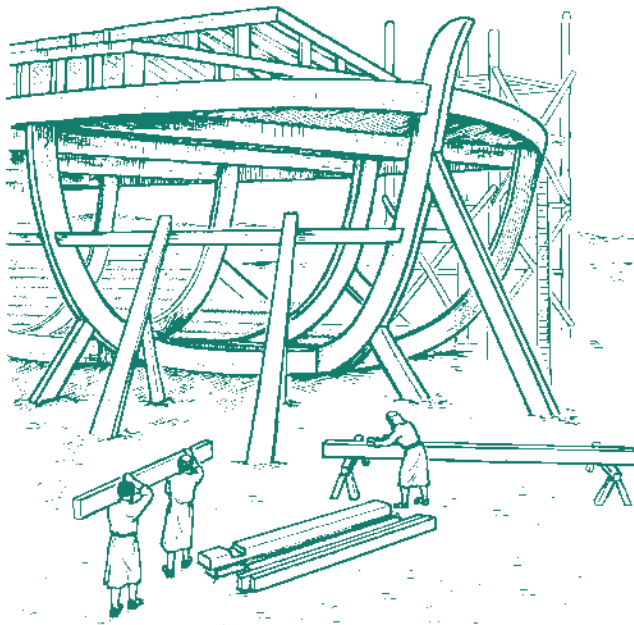


As you begin seventh grade, your life stretches before you. Today, you are making choices and forming habits that will help determine the whole course of your life.

When God created Adam, He gave Adam the responsibility to dress and keep the Garden of Eden. After Adam sinned, God told him that he would need to eat bread “in the sweat of [his] face” (Genesis 3:19). Adam then needed to work hard to grow food. God has also given every one of us the responsibility to work and manage His gifts of life, health, and abundant natural resources. True Christians choose their occupations carefully. They want all of their lives, including work, to bring glory to God.

In Math 702 through Math 710, we will focus on occupations and how the Christian serves God by the lifework he chooses. Colossians 3:23 reminds us, “And whatsoever ye do, do it heartily, as to the Lord, and not unto men.” Although most of us will work for employers for all or part of our lives, our first priority should be pleasing God.

Jesus warned us not to worry and fret about food and drink and clothing, but to “seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you.” (Matthew 6:33) Our task is to do the work God shows us to do, and God will provide for our needs out of His endless storehouse of good things.



Noah the ark-builder, Joseph the ruler of Egypt, Peter the fisherman, Matthew the tax collector, and many others were chosen to do special work for God. God has special work for you also. Math 700 will teach you some of the skills you will need to do that work well. Think about God’s plan for your life and how this course will equip you to serve Him in the work world.

## Pretest – Geometry Facts



Ask your teacher to initial the circle before you begin this pretest.

**Complete the sentences.** (1 point each row.) [7]

1. An acute angle measures between \_\_\_\_\_° and \_\_\_\_\_°.
2. A straight angle has \_\_\_\_\_°.
3. An obtuse angle measures between \_\_\_\_\_° and \_\_\_\_\_°.
4. A right triangle has one \_\_\_\_\_° angle.
5. The three angles of a triangle measure a total of \_\_\_\_\_°.
6. The four angles of a quadrilateral measure a total of \_\_\_\_\_°.
7. The four angles formed by a pair of intersecting lines measure a total of \_\_\_\_\_°.

**Write the numbers.** (1 point each blank.) [5]

8. A scalene triangle has \_\_\_\_\_ congruent sides.
9. An equilateral triangle has \_\_\_\_\_ congruent sides.
10. An isosceles triangle has \_\_\_\_\_ congruent sides.
11. The fraction we use for  $\pi$  (pi) is \_\_\_\_\_.
12. A quadrilateral has \_\_\_\_\_ sides.

**Write the formulas.** (1 point each.) [3]

13. The formula for the area of a circle is \_\_\_\_\_.
14. The formula for the volume of a rectangular prism is \_\_\_\_\_.
15. The formula for the perimeter of a rectangle or parallelogram is \_\_\_\_\_.



Ask your teacher to look over this pretest and mark the boxes on page 5.

I can have 15 answers correct.  
I must have 14 answers correct to pass.  
I have \_\_\_\_ correct.



### Scrambled Geometry

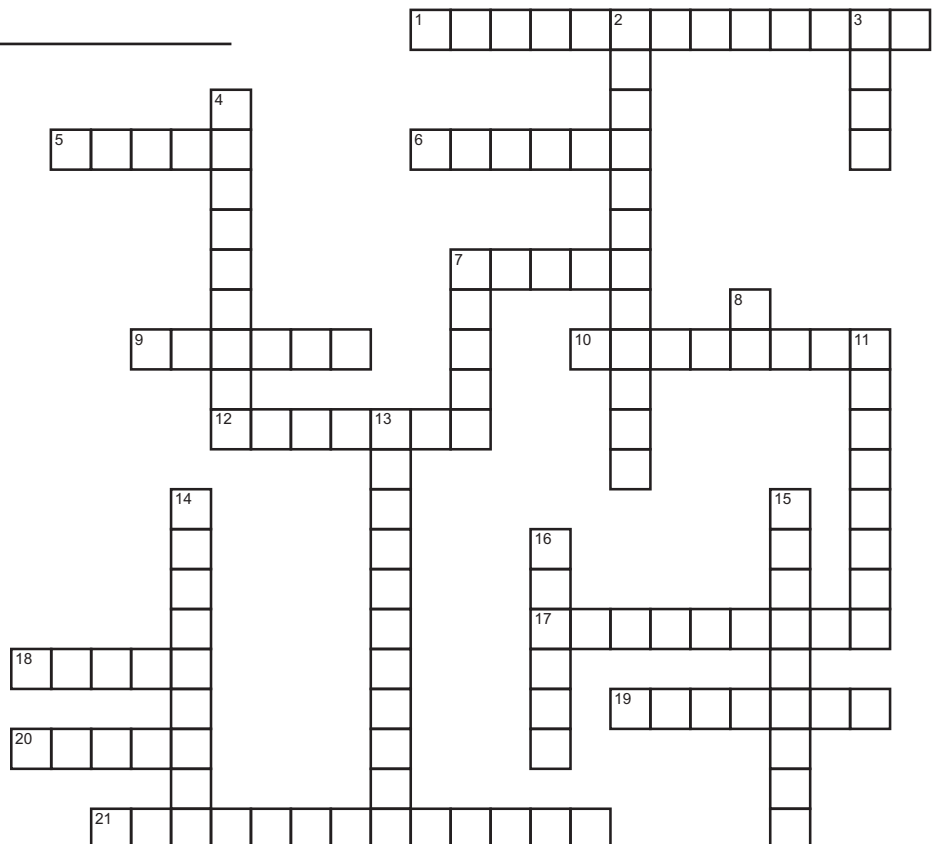
Unscramble the geometry words. Write them in the puzzle. All the words are found on page 3.

**ACROSS**

- 1. dlqarualitera \_\_\_\_\_
- 5. nlies \_\_\_\_\_
- 6. tsuoeb \_\_\_\_\_
- 7. elgna \_\_\_\_\_
- 9. mulveo \_\_\_\_\_
- 10. gtsathir \_\_\_\_\_
- 12. lnesaec \_\_\_\_\_
- 17. tergnacel \_\_\_\_\_
- 18. sipmr \_\_\_\_\_
- 19. moflrau \_\_\_\_\_
- 20. gtrih \_\_\_\_\_
- 21. plagllmeoarar \_\_\_\_\_

**DOWN**

- 2. snietctgenri \_\_\_\_\_
- 3. raea \_\_\_\_\_
- 4. scilesoes \_\_\_\_\_
- 7. tuace \_\_\_\_\_
- 8. ip \_\_\_\_\_
- 11. gtanirel \_\_\_\_\_
- 13. lqteirualea \_\_\_\_\_
- 14. mpiertere \_\_\_\_\_
- 15. gtunceonr \_\_\_\_\_
- 16. clicre \_\_\_\_\_



- Passed Lesson 1 pretest**  
Do the pretest on page 7.  
Do *Extra Activity* (1, 2, 3, 4, 5, 6, 7, 8, 9).
- Did not pass Lesson 1 pretest**  
Do all of Lesson 2.

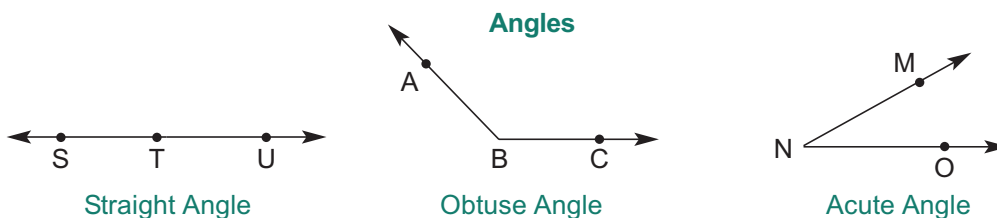
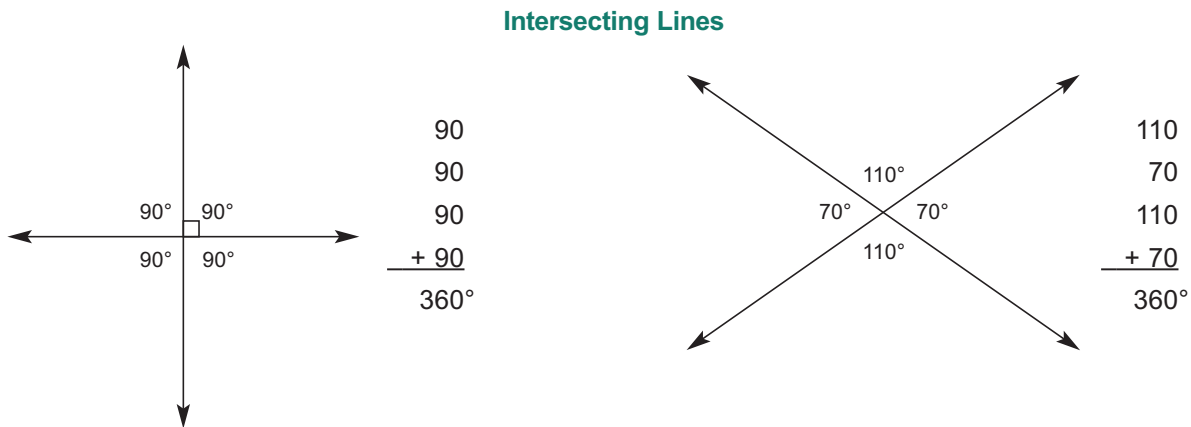
## Practice Set – Geometry Facts

### Introduced in Math 600, various lessons

If you need some help with geometry facts, use the Intermediate Math Reference Chart. The number after each exercise below tells where this item was introduced. For example, 602-03 means Item 1 was introduced in Math 602, Lesson 3.

#### Complete the sentences.

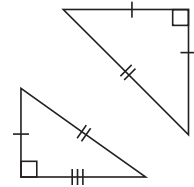
- The four angles formed by a pair of intersecting lines measure a total of \_\_\_\_\_°. 602-03
- A straight angle has \_\_\_\_\_°. 603-03
- An obtuse angle measures between \_\_\_\_\_° and \_\_\_\_\_°. 603-03
- An acute angle measures between \_\_\_\_\_° and \_\_\_\_\_°. 603-03



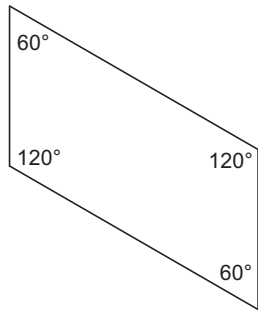
## Lesson 2

Complete the sentences.

- The four angles of a quadrilateral measure a total of \_\_\_\_\_°. 605-07
- The three angles of a triangle measure a total of \_\_\_\_\_°. 607-13
- A right triangle has one \_\_\_\_\_° angle. 606-13

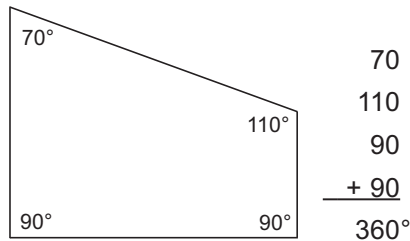


right triangles

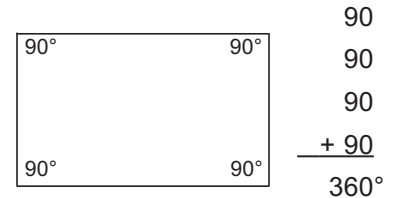


parallelogram

### Quadrilaterals

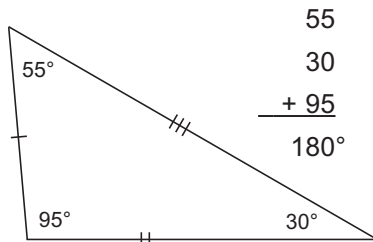


trapezoid

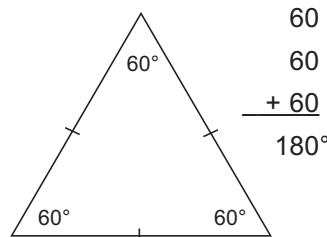


rectangle

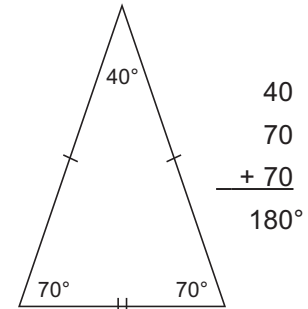
### Triangles



scalene



equilateral



isosceles

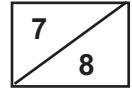
Write the numbers.

- A quadrilateral has \_\_\_\_\_ sides. 604-09
- An equilateral triangle has \_\_\_\_\_ congruent sides. 602-14
- A scalene triangle has \_\_\_\_\_ congruent sides. 602-14
- An isosceles triangle has \_\_\_\_\_ congruent sides. 602-14
- The fraction we use for  $\pi$  (pi) is \_\_\_\_\_. 603-13

Write the formulas. Refer to your Intermediate Math Reference Chart if you need to.

- The formula for the area of a circle is \_\_\_\_\_. 606-01
- The formula for the volume of a rectangular prism is \_\_\_\_\_. 607-09
- The formula for the perimeter of a rectangle or parallelogram is \_\_\_\_\_. 606-12

## Pretest – Division with Three-Digit Divisors



Ask your teacher to initial the circle before you begin this pretest.

Divide. Write remainders with *R*. (1 point each.) [8]

1. a.  $316 \overline{)2,938}$

b.  $790 \overline{)5,530}$

c.  $524 \overline{)25,689}$

2. a.  $241 \overline{)1,962}$

b.  $378 \overline{)35,589}$

c.  $656 \overline{)3,936}$

3. a.  $965 \overline{)44,390}$

b.  $632 \overline{)480,299}$



Ask your teacher to look over this pretest and mark the boxes on page 8.

I can have 8 answers correct.  
 I must have 7 answers correct to pass.  
 I have \_\_\_ correct.

- Passed Lesson 2 pretest**  
Do the pretest on pages 10, 11.  
Do *Extra Activity* (1, 2, 3, 4, 5, 6, 7, 8, 9).
- Did not pass Lesson 2 pretest**  
Do all of Lesson 3.

## Practice Set – Division with Three-Digit Divisors

### Introduced in Math 603, Lesson 13

#### Division With Multiples of 10, 100, or 1,000

Equal numbers of zeros in both the dividend and the divisor can be canceled before dividing.

$$\begin{array}{r} 9 \\ 3 \overline{) 27} \end{array}$$

$$\begin{array}{r} 9 \\ 3\cancel{0} \overline{) 27\cancel{0}} \end{array}$$

$$\begin{array}{r} 9 \\ 3\cancel{0}\cancel{0} \overline{) 2,7\cancel{0}\cancel{0}} \end{array}$$

$$\begin{array}{r} 9 \\ 3,\cancel{0}\cancel{0}\cancel{0} \overline{) 27,\cancel{0}\cancel{0}\cancel{0}} \end{array}$$

Divide mentally and write the quotients.

1. a.  $200 \overline{) 1,200}$

b.  $700 \overline{) 5,600}$

c.  $500 \overline{) 2,500}$

### Introduced in Math 604, Lesson 1

#### Dividing by Multiples of 100 With Remainders

When the divisor is a multiple of 100, but the dividend does not end with two zeros, there will be a remainder.

$$\begin{array}{r} 7 \text{ R}159 \\ 300 \overline{) 2,259} \\ \underline{2,100} \\ 159 \end{array}$$

Place the quotient above the correct place value in the dividend.

Divide. Write remainders with *R*.

2. a.  $900 \overline{) 5,034}$

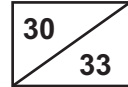
b.  $400 \overline{) 2,693}$

c.  $800 \overline{) 7,603}$





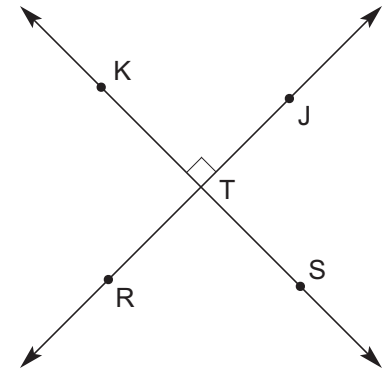
## Pretest – Geometry Applications



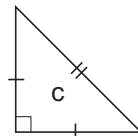
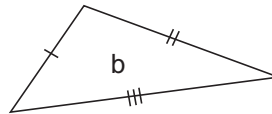
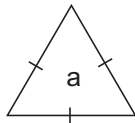
Ask your teacher to initial the circle before you begin this pretest.

Use the intersecting lines to do these exercises. (1 point each blank.) [3]

1. The sum of all the angles in the figure is \_\_\_\_\_.
2. Name two straight angles from the figure. \_\_\_\_\_



Classify by length of sides. Choose from *equilateral*, *isosceles*, or *scalene*. (1 point each.) [3]



3. a. \_\_\_\_\_      b. \_\_\_\_\_      c. \_\_\_\_\_

Classify by angles. (1 point.) [1]

4. Write the letter of the triangle above which is also a right triangle. \_\_\_\_\_



Write the letters from the quadrilaterals above to answer the questions. (1 point each blank.) [12]

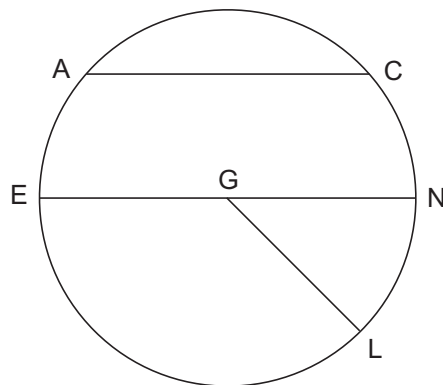
5. Which two figures are trapezoids? \_\_\_\_\_
6. Which figure is a square? \_\_\_\_\_
7. Which two figures are rectangles? \_\_\_\_\_
8. Which five figures are parallelograms? \_\_\_\_\_
9. Which two figures are rhombuses? \_\_\_\_\_

Do the exercises. (1 point each blank.) [6]

10. Name the diameter of the circle. \_\_\_\_\_

11. Name three radii. \_\_\_\_\_

12. Name two chords. \_\_\_\_\_



Follow directions. Write the answers. (1 point each blank.) [4]

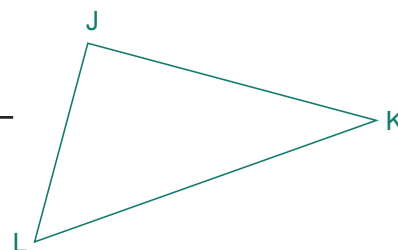
13. Measure the three angles of  $\triangle JKL$ .

a.  $\angle J$  \_\_\_\_\_

b.  $\angle K$  \_\_\_\_\_

c.  $\angle L$  \_\_\_\_\_

14. The sum of the measures of the three angles is \_\_\_\_\_.



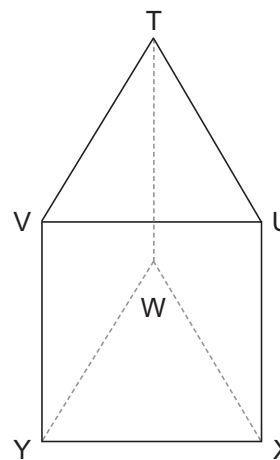
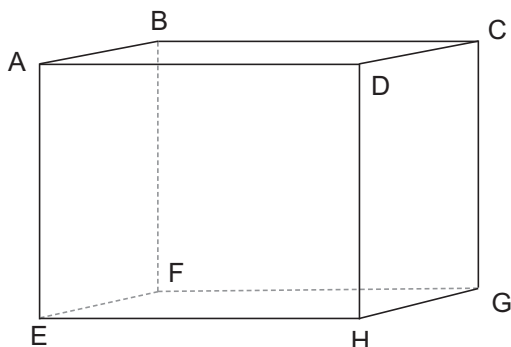
Tell whether each part names a *face*, an *edge*, or a *vertex* of one of the figures below.

(1 point each blank.)

[4]

15. a. TW \_\_\_\_\_

b. A \_\_\_\_\_



Ask your teacher to look over this pretest and mark the boxes on page 12.

I can have 33 answers correct.  
 I must have 30 answers correct to pass.  
 I have \_\_\_ correct.