

Day 12 Warm-Ups: p.51 (15 - 27 odd)

Perform each operation. Write answers in simplest form.


15. $2\frac{3}{8} + \frac{13}{4} = 2\frac{3}{8} + \frac{26}{8} = \frac{45}{8}$


17. $6\frac{2}{9} - 2\frac{2}{3} = 6\frac{2}{9} - 2\frac{6}{9} = \frac{56}{9} - \frac{24}{9} = \frac{32}{9}$


19. $\frac{7}{9} \cdot \frac{1}{5} = \frac{7}{45}$


21. $\frac{3}{5} \div \frac{9}{10} = \frac{3}{5} \cdot \frac{10}{9} = \frac{2}{3}$


Identify each shape. Write all the names that apply for each shape.

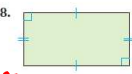
23.  **Parallelogram, Rectangle, Square!**

24. 

25.  **Trapezoid**

26. 

27.  **Parallelogram**

28. 


RETEACHING 2-1 Day 12

UNITS OF MEASURE

The process of finding size, quantities, or amounts is called measurement. The smaller the unit of measure you use, the more precise the measurement.

_____ is the process used to find sizes, quantities, or amounts. A measure that is nearly exact is said to be _____. Using the most appropriate tool for a measurement will result in a more accurate measure. For example, using a tape measure around a cylinder is more accurate than using a wooden ruler.

A measurement is always an approximation—it is never exact. _____ of a measurement is the exactness to which a measurement is made. A measure is more precise when you use a smaller unit of measure. Measuring to the nearest $\frac{1}{16}$ in. is more precise than measuring to the nearest $\frac{1}{2}$ in.



Example 1

Which unit of measure gives a more precise measurement?

a. meter centimeter b. pint quart

← Smaller

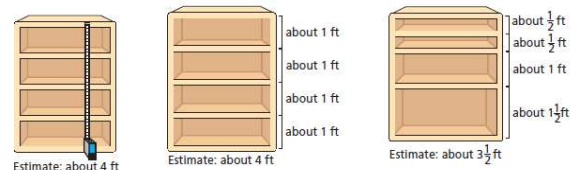
Solution

a. A centimeter is more precise since it is a smaller unit of measure.

b. A pint is more precise since it is a smaller unit of measure.

_____ measured using tools such as _____ with _____ Scales measure mass or weight. There are many other measuring tools such as a compass, a protractor, an eye dropper, a caliper and a stop watch.

_____ e. Three estimation strategies are shown.



Example 2

Choose the appropriate unit to estimate the measure.

a. width of this textbook. inch foot, or yard

b. fruit juice in a bottle. quart liter, or kiloliter

Solution


a. inch b. liter

Estimates include a unit of measure in order to be understood. To say "the estimated length of a desk is 5" is unclear. However, 5 ft is a clear estimation.

Estimation Tip
 The following are examples of approximate metric measurements. A millimeter is about the thickness of your fingernail. A centimeter is about the width of your pinky fingernail. A decimeter is about the width of your hand. A meter is about the distance from your nose to the finger tips of your outstretched arm.

Example 3
 Choose the best estimate for each measure.
 a. length of a classroom: 30 cm, 30 ft, or 30 yd
 b. diameter of a basketball: 24 ft, 24 mm, or 24 cm

Solution
 a. 30 ft
 b. 24 cm



Kilometer
Hand
Decimeter
3.14
Centimeter
Millimeter

TRY THESE EXERCISES

Which unit of measure gives a more precise measurement?
 1. meter, decimeter
 2. inch, centimeter
 3. yard, foot
3 FT = 1 yd

Name the tool or tools that would best measure each object.
 4. width of a door: *tape measure ruler*
 5. a person's waist: *tape measure*
 6. cooking oil for a recipe: *cup, tsp, tbsp*

Choose the appropriate unit to estimate the measure.
 7. flour in a bread recipe: *cup, teaspoon, or liter*
 8. diameter of a quarter: meter, decimeter, or millimeter
K H D B D C M

Choose the best estimate for each measure.
 9. length of a newborn baby: 47.5 cm, 47.5 mm, or 47.5 ft
 10. juice in a can: 355 oz, 355 pt, or 355 mL

EXERCISES

Which unit of measure gives a more precise measurement?
 1. milliliter, liter (HINT: There are 1000 milliliters in 1 liter.)
 2. inch, yard (HINT: There are 36 inches in 1 yard.)
 3. gram, kilogram (HINT: There are 1000 grams in 1 kilogram.)
 4. pint, gallon (HINT: There are 8 pints in 1 gallon.)

K H D B D C M
liter
yard
gallon
grams
liters
meters
Bigger
Smaller

Tell whether each statement is true or false. Write true or false.

- A pound gives a more precise measurement than an ounce.
- A foot gives a more precise measurement than a mile.
- A milligram gives a more precise measurement than a gram.
- A kilometer gives a more precise measurement than a meter.
- A cup gives a more precise measurement than a pint.