Name _____ Date _____

# BEGINNING-OF-YEAR TEST

**Give the best answer for each question.**

**1.** Add.

$$\begin{array}{r} 583{,}602 \\ +\ 341{,}978 \\ \hline \end{array}$$

**2.** Subtract.

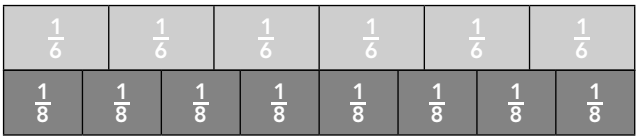
$$\begin{array}{r} 6{,}425 \\ -\ \ 783 \\ \hline \end{array}$$

**3.** Find the quotient and remainder.

$3\overline{)16}$

- ○ 6 R3
- ○ 5 R4
- ○ 6 R1
- ○ 5 R1

**4.** Use the model to complete the equivalent fraction.




$\frac{3}{6} = \frac{\square}{8}$

**5.** Add.

$2\frac{3}{12} + 3\frac{2}{12} =$ _____

**6.** Compare. Write >, =, or <.

$3\frac{4}{9} \bigcirc 3\frac{2}{3}$

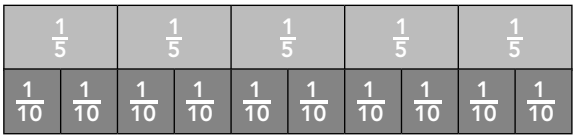
**7.** Subtract.

$$\begin{array}{r} 423{,}197 \\ -396{,}248 \\ \hline \end{array}$$

**8.** What is 4,824 ÷ 8?

- ○ 603
- ○ 630
- ○ 60 R3
- ○ 600 R3

**9.** Use the model to complete the equivalent fraction.

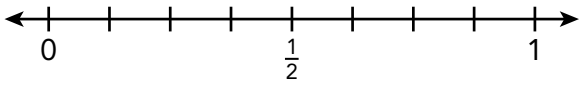



$\frac{3}{5} = \frac{\square}{10}$

**10.** Subtract.

$5\frac{7}{8} - 2\frac{5}{8} =$ _____

**11.** Use the number line to compare. Write >, =, or <.




$\frac{1}{4}$ ◯ $\frac{1}{2}$ $\quad$ $\frac{5}{8}$ ◯ $\frac{1}{2}$

So, $\frac{1}{4}$ ◯ $\frac{5}{8}$.

**12.** What are the partial products?

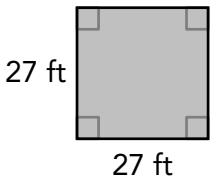
$$\begin{array}{r} 68 \\ \times\ 32 \\ \hline \end{array}$$

- ○ 136 and 204
- ○ 136 and 2,040
- ○ 1,360 and 204
- ○ 1,360 and 2,040

**13.** Andrew is one and five tenths meters tall. Give the height as a decimal.

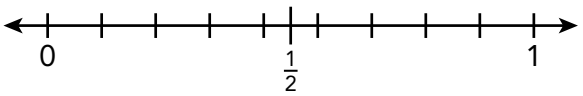
_____ m

**14.** What is the area of the figure?




- ○ 27 ft$^2$
- ○ 108 ft$^2$
- ○ 54 ft$^2$
- ○ 729 ft$^2$

**15.** Use the number line to compare. Write >, =, or <.




$\frac{2}{3}$ ◯ $\frac{1}{2}$ $\quad$ $\frac{4}{9}$ ◯ $\frac{1}{2}$

So, $\frac{2}{3}$ ◯ $\frac{4}{9}$.

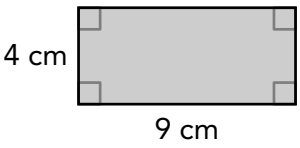
**16.** What is $\frac{17}{100} + \frac{5}{10}$?

- ○ $\frac{22}{10}$
- ○ $\frac{67}{10}$
- ○ $\frac{22}{100}$
- ○ $\frac{67}{100}$

**17.** Find the product. Give your answer as a mixed number.

$15 \times \frac{1}{4} =$ _____

**18.** What is the area of the figure?




- ○ 13 cm$^2$
- ○ 36 cm$^2$
- ○ 26 cm$^2$
- ○ 72 cm$^2$

**19.** Find the sum.

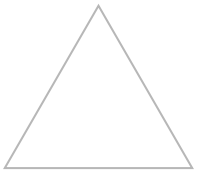
$$\frac{2}{10} + \frac{3}{100} = \frac{\square}{\square}$$

**20.** Multiply.

$$\begin{array}{r} 83 \\ \times\ 29 \\ \hline \end{array}$$

**21.** Match each triangle to its classification. Some triangles may be named in more than one way.

right



equilateral

isosceles



scalene

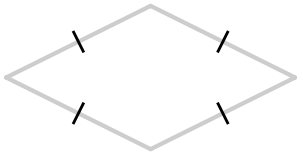
**22.** Write $\frac{47}{100}$ as a decimal.

_____

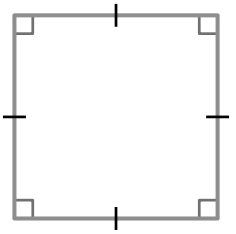
**23.** Divide.

$8\overline{)2,504}$

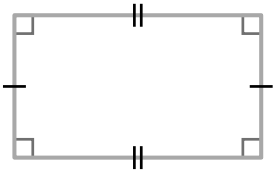
**24.** Match each quadrilateral to its most precise name.



rectangle



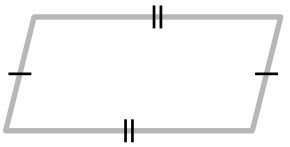
square



parallelogram



rhombus



**25.** Jan draws a circle. She colors $\frac{1}{5}$ red and $\frac{2}{5}$ purple. What equation represents the fraction of the circle that Jan colors?

_____

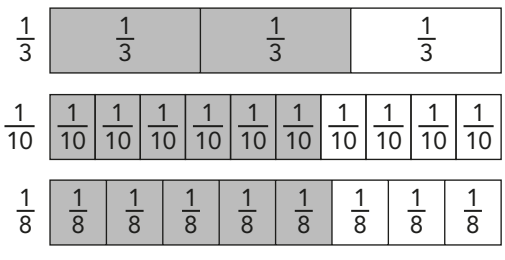
**26.** Jon is playing a computer game. He scores 125,372 points in round 1 and 137,972 points in round 2. What is the total number of points Jon scores in both rounds?

Jon scores _____ points.

**27.** Write the fractions in order from least to greatest.

$\frac{2}{3}$ $\frac{6}{10}$ $\frac{5}{8}$

Use the fraction bars to help.




_____, _____, _____

_____, _____, _____

**28.** A game spinner is divided into 8 equal sections. Four of the sections are blue and the rest are orange. What equation represents the fraction of the spinner that is orange?

_____

**29.** Zachary walks 1,200 feet. Forrest walks 872 feet. How many more feet does Zachary walk than Forrest?

Zachary walks _____ feet more.

**30.** Lin has two ribbons. The length of the blue ribbon is 1 yard 2 feet. The length of the red ribbon is 5 feet.

How do the lengths compare?

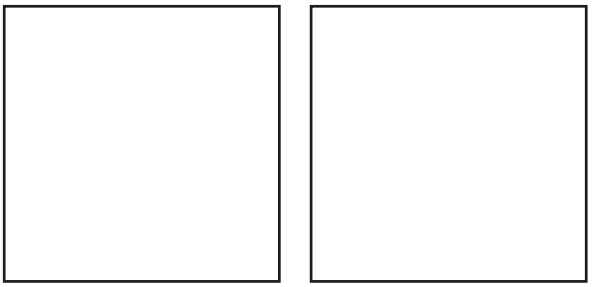
- ○ The length of the blue ribbon is less than the length of the red ribbon.
- ○ The length of the blue ribbon is greater than the length of the red ribbon.
- ○ The length of the blue ribbon is the same as the length of the red ribbon.

**31.** Lisa is planting a rectangular garden with six sections that are the same size. She plants vegetables in four sections. What difference represents the fraction of the garden that does not have vegetables?

$\frac{6}{6} - \frac{4}{6} = \frac{\square}{\square}$, so _____ does not have vegetables.

**32.** Draw a model to find the product.

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

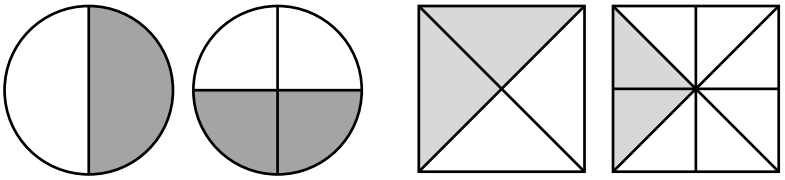


**33.** Write each fraction as a decimal. Then complete the sentence.

$\frac{3}{10} =$ _____ $\frac{23}{100} =$ _____

The value of 3 in the _____ place is 10 times the value of 3 in the _____ place.

**34.** Circle the pair of models that show equivalent fractions.



What equivalent fractions do the models represent?

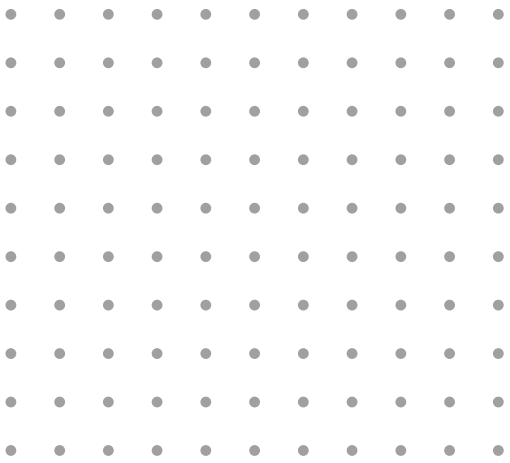
$\frac{\square}{\square} = \frac{\square}{\square}$

**35.** Which of these fractions are greater than $\frac{1}{3}$?
Select **all** that apply.

- ○ $\frac{3}{12}$
- ○ $\frac{3}{6}$
- ○ $\frac{2}{9}$
- ○ $\frac{10}{12}$

**36.** Harper reads for $\frac{1}{4}$ hour five days a week. Arlen reads for $\frac{3}{4}$ hour two days a week. Who spends more time reading during the week? Justify your answer.

**37.** Draw a trapezoid with 2 right angles.



**38.** Ben divides a sheet of paper into six equal parts. He colors one part yellow and three parts blue. What sum represents the fraction of the paper Ben colors? Draw a model to help.

$\frac{1}{6} + \frac{3}{6} = \frac{\square}{\square}$, so Ben colors _____ of the paper.

**39.** Estimate the sum 16,927 + 54,346. Then add.

Estimate: _____

$$\begin{array}{r} 16,927 \\ +\,54,346 \\ \hline \end{array}$$

**40.** Scott has $1\frac{1}{4}$ cups of flour in a container and $2\frac{3}{4}$ cups of flour in a bag. He uses $1\frac{3}{4}$ cups of flour to bake muffins.

**Part A**

What expression represents the amount of flour Scott has left?

_____

**Part B**

How much flour does Scott have left?

Scott has _____ cup(s) of flour left.

**41.** Eduardo has the amounts of juice shown.

Apple: 1 gal 3 qt

Orange: 2 gal

Grape: 1 gal 1 qt

**Part A**

Rename each quantity in quarts.

Apple: 1 gal 3 qt = _____ qt

Orange: 2 gal = _____ qt

Grape: 1 gal 1 qt = _____ qt

**Part B**

What is the order of the types of juice, based on quantity, from greatest to least?

_____, _____, _____

**42.** Find $\frac{7}{10} - \frac{5}{10}$.

**Part A**

Explain how you can use a fraction strip to find the difference.

**Part B**

Subtract.

$$\frac{7}{10} - \frac{5}{10} = \frac{\square}{\square}$$

**43.** Find $93 \times 42$.

**Part A**

Estimate the product by rounding.

_____

**Part B**

How will the actual product compare to the estimate?

- ○ The actual product will be greater than the estimate.
- ○ The actual product will be less than the estimate.
- ○ The actual product will be equal to the estimate.

**Part C**

Justify your answer to Part B.

**Part D**

Find the actual product.

$$\begin{array}{r} 93 \\ \times\ 42 \\ \hline \end{array}$$

**44.** Compare $\frac{7}{8}$ and $\frac{9}{12}$ using $>$, $<$, or $=$.

**Part A**

$\frac{7}{8} \bigcirc \frac{9}{12}$

**Part B**

Justify your answer to Part A.

**45.** Find $\frac{7}{12} + \frac{1}{12} + \frac{3}{12}$.

**Part A**

Draw a model to show the sum.

**Part B**

$\frac{7}{12} + \frac{1}{12} + \frac{3}{12} = \frac{\square}{\square}$

**46.** Find $\frac{8}{10} + \frac{9}{100}$.

**Part A**

Explain how you can find the sum.

**Part B**

Add.

$\frac{8}{10} + \frac{9}{100} = \frac{\square}{\square}$

**47.** Vincent is mailing 4 packages with the weights shown.

Package A: 2 lb 12 oz
Package B: 1 lb 14 oz
Package C: 14 oz
Package D: 1 lb 12 oz

**Part A**
Rename each weight in ounces.

2 lb 12 oz = _____ oz

1 lb 14 oz = _____ oz

14 oz = _____ oz

1 lb 12 oz = _____ oz

**Part B**
What is the order of the packages, based on weight, from least to greatest?

_____, _____, _____, _____

**48.** Find the area of the figure. Be sure to use the correct units in your answer.


**Part A**
The area of the figure is _____.

**Part B**
Explain how you found the area.