

Activity 13 Quiz

pg. 1

$$1. \begin{array}{r} a + 97 = 125 \\ -97 \quad -97 \\ \hline \end{array}$$

$$a + 0 = 28$$

$$\boxed{a = 28}$$

$$\text{Check: } 28 + 97 = 125$$

$$125 = 125 \checkmark$$

$$\begin{array}{r} 28 \\ + 97 \\ \hline 125 \end{array}$$

$$2. 4 = c - 26$$

$$\begin{array}{r} +26 \quad +26 \\ \hline \end{array}$$

$$30 = c + 0$$

$$30 = c \text{ or}$$

$$\boxed{c = 30}$$

$$\text{Check: } 4 = 30 - 26$$

$$4 = 4 \checkmark$$

$$\begin{array}{r} 30 \\ - 26 \\ \hline 4 \end{array}$$

$$3. \begin{array}{r} 12.95 = y + 3.19 \\ -3.19 \quad -3.19 \\ \hline \end{array}$$

$$9.76 = y + 0$$

$$9.76 = y$$

or

$$\boxed{y = 9.76}$$

$$\text{Check: } 12.95 = 9.76 + 3.19$$

$$12.95 = 12.95 \checkmark$$

$$\begin{array}{r} 9.76 \\ + 3.19 \\ \hline 12.95 \end{array}$$

$$4. \begin{array}{r} x - \frac{1}{5} = \frac{1.5}{2.5} \Rightarrow \frac{5}{10} \\ + \frac{1}{5} \quad + \frac{1.2}{5.2} \quad + \frac{2}{10} \\ \hline \end{array}$$

$$x + 0 = \frac{7}{10}$$

$$\boxed{x = \frac{7}{10}}$$

$$\text{Check: } \frac{7}{10} - \frac{1}{5} = \frac{1}{2}$$

or

$$\frac{7}{10} - \frac{2}{10} = \frac{5}{10}$$

$$\frac{5}{10} = \frac{5}{10} \checkmark$$

$$\begin{array}{r} \frac{7}{10} - \frac{2}{10} = \frac{5}{10} \end{array}$$

or

$$\frac{7}{10} - \frac{1.2}{5.2} \Rightarrow \frac{7}{10} - \frac{2}{10} \Rightarrow \frac{5}{10}$$

5.

$$\begin{array}{r} \frac{2}{3} + X = \frac{3 \cdot 3}{4 \cdot 3} = \frac{9}{12} \\ - \frac{2}{3} \quad \quad - \frac{2 \cdot 4}{3 \cdot 4} \rightarrow - \frac{8}{12} \\ \hline 0 + X = \frac{1}{12} \end{array}$$

$$\boxed{X = \frac{1}{12}}$$

Check: $\frac{2}{3} + \frac{1}{12} = \frac{3}{4}$

or

$$\frac{8}{12} + \frac{1}{12} = \frac{9}{12}$$

$$\frac{9}{12} = \frac{9}{12}$$

6.

step 1: Lee's age + 32 = 67

step 2: X = Lee's age

step 3: X + 32 = 67

step 4:
$$\begin{array}{r} X + 32 = 67 \\ - 32 \quad - 32 \\ \hline X = 35 \end{array}$$

step 5: $35 + 32 = 67$

$$67 = 67 \checkmark$$

* USE of any variable ok! *

$$\boxed{X = 35 \text{ years}}$$

$$\begin{array}{r} 35 \\ + 32 \\ \hline 67 \end{array}$$

Option 2

* $67 - 32 = \text{Lee's age}$

$$67 - 32 = X$$

$$X = \text{Lee's age}$$

$$\begin{array}{r} 67 \\ - 32 \\ \hline 35 \end{array} = X$$

7.

$$\textcircled{1} \text{ length of other piece} + 9 = 24$$

$$\textcircled{2} x = \text{length of other piece}$$

$$\textcircled{3} x + 9 = 24$$

$$\textcircled{4} \begin{array}{r} x + 9 = 24 \\ -9 \quad -9 \\ \hline x = 15 \end{array}$$

$$\boxed{x = 15 \text{ inches}}$$

$$\textcircled{5} 15 + 9 = 24$$

$$24 = 24 \checkmark$$

$$8. \textcircled{1} \text{ Joella's sister earns} + 2.50 = 12.75$$

$$\textcircled{3} s + 2.50 = 12.75$$

$$\textcircled{2} s = \text{sister's earnings}$$

$$\textcircled{4} \begin{array}{r} s + 2.50 = 12.75 \\ -2.50 \quad -2.50 \\ \hline s + 0 = 10.25 \end{array}$$

$$s + 0 = 10.25$$

$$\boxed{s = \$10.25}$$

$$\textcircled{5} 10.25 + 2.50 = 12.75$$

$$\checkmark 12.75 = 12.75$$

9.

$$\textcircled{1} \text{ people who entered after} + 2,120 = 8,596$$

$$\textcircled{2} p = \text{people entered after 1st hour}$$

$$\textcircled{3} p + 2,120 = 8,596$$

$$\textcircled{4} \begin{array}{r} p + 2,120 = 8,596 \\ -2,120 \quad -2,120 \\ \hline p + 0 = 6,476 \end{array}$$

$$\boxed{p = 6,476 \text{ people after the 1st hour}}$$

$$\textcircled{5} 6,476 + 2,120 = 8,596$$

$$\begin{array}{r} 6,476 \\ +2,120 \\ \hline 8,596 \end{array} = 8,596 \checkmark$$

10.

$$\textcircled{1} \text{ attendance at start} - 2,500 = 6,700$$

$$\textcircled{2} a = \text{attendance at start}$$

$$\textcircled{3} a - 2,500 = 6,700$$

$$\textcircled{4} \begin{array}{r} a - 2,500 = 6,700 \\ +2,500 \quad +2,500 \\ \hline a + 0 = 9,200 \end{array}$$

$$\boxed{a = 9,200 \text{ people}}$$

$$\textcircled{5} 9,200 - 2,500 = 6,700$$

$$\begin{array}{r} 9,200 \\ -2,500 \\ \hline 6,700 \end{array} = 6,700 \checkmark$$