ALC Liberal Arts Math

Unit 7

1. A comparison of two or more quantities

 a. ratio

 b. proportion

 c. equation

 d. fraction

2. A mathematical sentence in which two expressions are connected by an equality symbol.

 a. ratio

 b. proportion

 c. equation

 d. fraction

3. To find all numbers that make an equation or inequality true.

 a. integers

 b. proportion

 c. ratio

 d. solve

4. A mathematical sentence stating that two ratios are equal.

 a. integers

 b. proportion

 c. ratio

 d. solve

5. Figures or objects that are the same shape and size are said to be

 a. proportion

 b. ratio

 c. polygons

 d. congruent

6. The constant that is multiplied by the lengths of each side of a figure that produces an image that is the same shape as the original figure is the

 a. proportion

 b. scale factor

 c. congruent

 d. ratio

7. A polygon that is both equilateral and equiangular is called a

 a. regular polygon

 b. irregular polygon

 c. circle

 d. cuboid

8. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a line that divides a figure into two congruent halves that are mirror images of each other.

 a. angle of rotation

 b. translation

 c. line of symmetry

 d. horizontal line

9. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a transformation of a figure by turning it about a center point or axis.

 a. rotation

 b. reflection

 c. translation

 d. enlargement

10. Solve the proportion $\frac{x}{6}=\frac{4}{12}$

 a. x = 3

 b. x = 8

 c. x = 2

 d. x = 1

11. Solve the proportion $\frac{3}{5}=\frac{15}{v}$

 a. v = 5

 b. v = 25

 c. v = 30

 d. v = 10

12. Solve the proportion $\frac{6}{w}=\frac{9}{3}$

 a. w = 2

 b. w = 3

 c. w = 1.5

 d. w = 18

13. Solve the proportion $\frac{6}{y}=\frac{18}{30}$

 a. y = 3

 b. y = 12

 c. y = 9

 d. y = 10

14. Solve the proportion $\frac{9}{6}=\frac{z}{4}$

 a. z = 2

 b. z = 1.5

 c. z = 6

 d. z = 3

15. Solve the proportion $\frac{6}{8}=\frac{r}{12}$

 a. r = 9

 b. r = 1.5

 c. r = 3

 d. r = 4

16. To make 20 pancakes you must use 2 eggs. How many eggs are needed to make 100 pancakes?

 a. 4 eggs

 b. 6 eggs

 c. 12 eggs

 d. 10 eggs

17. A teacher can grade 5 exams in 10 minutes. How long would it take the teacher to grade 20 exams?

 a. 20 minutes

 b. 40 minutes

 c. 10 minutes

 d. 15 minutes

18. A photo that is 4inches by 6 inches needs to be enlarged so that the shorter sides are 6 inches. What will be the length of the enlargement?

 a. 12 inches

 b. 1.5 inches

 c. 9 inches

 d. 15 inches

19. The goal post on the football field casts an 18-foot shadow. The 4-foot water cooler casts a 5-foot shadow. How tall is the goal post?

 a. 14.4-foot

 b. 4-foot

 c. 6-foot

 d. 16.6 foot

20. A tree casts a 50-foot shadow at the same time a 4-foot fence post casts a 3-foot shadow. How tall is the tree?

 a. 14.4-foot

 b. 60-foot

 c. 76.6-foot

 d. 66.67 foot