Unlock Pre-Algebra Readiness Test

1) Hannah is planning a road trip with a total driving distance of 572 miles. How many miles long is her trip, rounded to the nearest hundred?

2) A school needs to buy new laptops for all its teachers. If there are 26 teachers in the school and each laptop costs $730, how much does the school need to spend on laptops?

3) A book has 554 pages. Elizabeth wants to read this book over 6 days and she wants to read the same number of pages every day. How many pages must she read each day, and how many pages will be left over after the 6th day?

4) Calculate by adding and subtracting the integers:

$$5 - (-2) + (-9) - 1 = ?$$

5) Calculate by multiplying and dividing the integers:

$$4 \cdot (-9) \div (-3) = ?$$

6) Calculate the exponent:

$$4^3 = ?$$

7) Evaluate:

$$24 \div (14 - 8) + 9^2 = ?$$

8) Find the greatest common factor of the numbers 21 and 27.

9) Joe and Katie are friends who both drive their own car to work every day. Katie has to buy gas for her car every 5 days. Joe's car has a bigger tank so he only has to buy gas every 8 days. If one day they see each other at the gas station, how many more days will it be until they meet at the gas station again?

10) Subtract the fractions. Make sure your answer is in its most reduced form.

$$\frac{2}{4} - \frac{1}{5} = ?$$

11) Divide the fractions. Make sure your answer is in its most reduced form.

$$\frac{6}{9} \div \frac{4}{3} = ?$$

12) Part way through a pizza party, Kayla counts all of the slices that are remaining and finds 19. Each pizza was originally cut into 8 slices. Write a mixed number to represent the amount of pizza remaining.

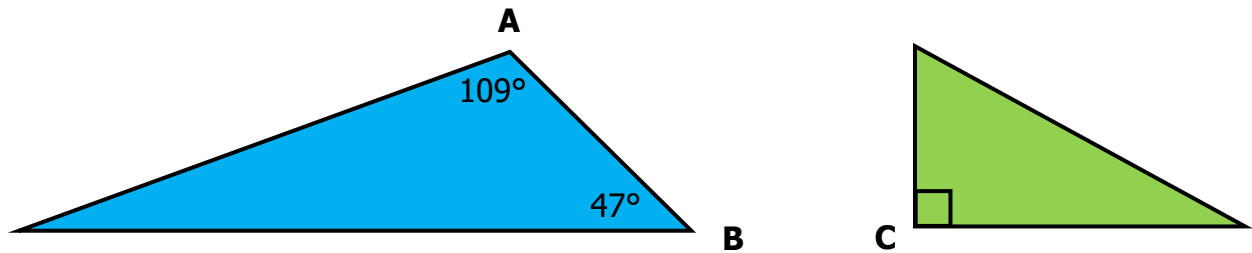**13)** Round the decimal number to the nearest tenth.

121.545

14) Convert the fraction to a decimal.

$$\frac{7}{8}$$

15) Tristan is training for cross-country running. He runs 8 laps of a track in 594 seconds. What is his unit rate?

16) A theatre company is putting on a musical. If the theatre can hold 190 people, and they sell 60% of their tickets, how many people will attend the show?

17) Classify angles **A**, **B**, and **C** as acute, right or obtuse.

18) A cell phone has a rectangular screen that is 4.3 inches long and 2.8 inches wide. What is the area of this cell phone screen?

19) Find the median of the list of numbers:

11, 2, 18, 4, 14, 8, 18

20) Jamie has grades of 86, 92, 78 and 81 on her report card. What is her average grade?

Unlock Pre-Algebra Readiness Test Answer Key

1) 600

2) $18,980

3) 92, with a remainder of 2 pages

4) -3

5) 12

6) 64

7) 85

8) 3

9) 40

10) $\dfrac{3}{10}$

11) $\dfrac{1}{2}$

12) $2\dfrac{3}{8}$

13) 121.5

14) 0.875

15) 74.25 s/lap

16) 114

17) A: Obtuse, B: Acute, C: Right

18) 12.04 in^2

19) 11

20) 84.25

Students with 16 or more questions correct are ready for Unlock Pre-Algebra.