

Are you ready for Prealgebra?

Note: Attempt all the problems without a calculator.

1. Arithmetic with whole numbers.

(1) 13×12

(2) 114×227

(3) $2024 \times 5 \times 0$

(3) $984 \div 8$

(4) $624 \div 12$

(5) $63755 \div 311$

2. Arithmetic and simplification with fractions.

(1) $\frac{4}{23} + \frac{7}{23}$

(2) $\frac{7}{8} - \frac{2}{8}$

(3) $12 \times \frac{1}{3}$

(4) $\frac{2}{8} = \frac{?}{4}$

(5) $\frac{4}{12} = \frac{1}{?}$

(6) $\frac{11}{3} = 3 \frac{?}{3}$

3. Arithmetic with decimal numbers.

(1) $3.21 + 4.899$

(2) $11.84 - 2.96$

(3) $5.01 - 4.985$

(4) 7.8×0.3

(5) 2.4×1.1

(6) $3.48 \div 4$

3. Comparison of numbers (fill each circle with =, > or <)

(1) $634 \bigcirc 643$

(2) $3 \bigcirc -3$

(3) $-4 \bigcirc -2$

(4) $5 \bigcirc 5.000$

(5) $5.42 \bigcirc 54.2$

(6) $3.89 \bigcirc 3.91$

(7) $\frac{2}{5} \bigcirc \frac{3}{5}$

(8) $\frac{5}{7} \bigcirc \frac{5}{9}$

(9) $\frac{6}{9} \bigcirc \frac{2}{3}$

4. Word problems.

- (1) Tim has 3 red bags of candies and 4 green bags of candies. Each red bag has 12 candies, and each green bag has 10 candies. How many candies does Tim have in total.
- (2) Tim has a bag of 16 candies. After he eats $\frac{1}{4}$ of candies, how many candies are left.
- (3) Vic's age is twice Tim's age. Vic is 9 years older than Tim. How old is Vic.
- (4) One inch is about 2.54 centimeters. One foot is 12 inches. How many centimeters is one foot?
- (5) Tim had some candies. He ate $\frac{1}{2}$ of his candies in the morning. In the afternoon, he ate $\frac{1}{2}$ of the candies left from the morning. After he ate 2 more candies in the evening, he had no candies any more. How many candies did Tim eat altogether in the day?