

Homework 20.



1. Peter's speed is $5\frac{1}{5} \frac{km}{h}$ (*kph*). How far will he go in
- 2 hours
 - $1\frac{1}{5}$ hour
 - 45 minutes
 - 125 minutes

(Represent the result in kilometers and meters, for example: 1km 250 m.)

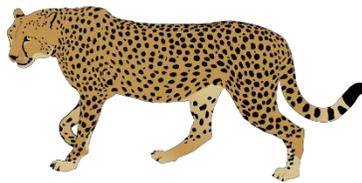
2. 1.5 km Julia walked in 20 minutes. What was her speed?
Represent your answer in

a. $\frac{km}{h}$; b. $\frac{km}{min}$; c. $\frac{m}{h}$; d. $\frac{m}{min}$

3. The caterpillar is crawling along the trunk of a poplar. In the first hour, it rose by 10 cm. In the second hour, it dropped by 4 cm. In the third hour, it rose again by 10 cm. And in the fourth hour, it dropped by 4 cm. The caterpillar continued to rise and fall for several hours. How many centimeters will the caterpillar have risen in 11 hours?
4. Represent the following values of speed in km per hour units and connect to the appropriate pictures.



$$5\frac{m}{h};$$



$$92\frac{m}{min};$$



$$1\frac{4}{5}\frac{km}{min};$$

5. Evaluate:

a. $\frac{-1.5 + (-1)}{-1.5 - (-1)}$; b. $\frac{1.5 - (-3.5)}{1.5 + (-3.5)}$; c. $\frac{-2.5 + 0.4}{-2.5 \cdot 0.4}$; d. $\frac{-0.5 \cdot (-0.6)}{-0.5 - 0.6}$

6. Write the smallest 3-digit multiple of 3, whose first digit is 7.
7. There are 32 students in the class, and each student plays at least one of two sports: soccer or basketball. 18 students play soccer, and 20 students play basketball. How many students play both sports?
8. Compare fractions without bringing them to common denominator:

$$\frac{1}{4} \text{ and } \frac{1}{5}; \quad \frac{1}{10} \text{ and } \frac{1}{100}; \quad \frac{1}{101} \text{ and } \frac{1}{100}; \quad \frac{1}{50} \text{ and } \frac{1}{60};$$

$$\frac{3}{4} \text{ and } \frac{3}{5}; \quad \frac{7}{10} \text{ and } \frac{7}{12}; \quad \frac{9}{16} \text{ and } \frac{9}{17}; \quad \frac{11}{15} \text{ and } \frac{11}{14};$$

$$\frac{2}{9} \text{ and } \frac{7}{8}; \quad \frac{9}{10} \text{ and } \frac{10}{9}; \quad \frac{5}{9} \text{ and } \frac{3}{8}; \quad \frac{2}{7} \text{ and } \frac{7}{12};$$

9.