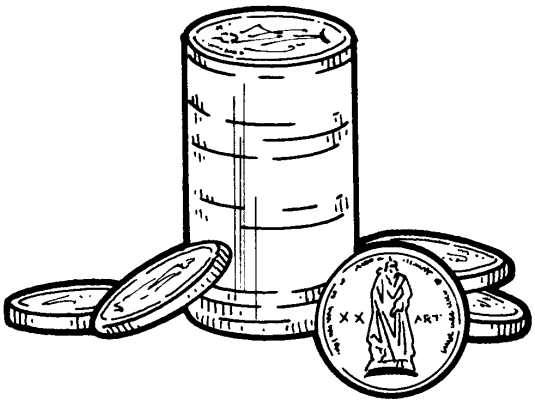
5 Practice • • • • • • • • • Identifying Extra Information in Word Problems

Directions: Using the information on page 21, solve the problems below and on pages 23 and 24.

Russian rubles are interesting coins. They are sometimes smaller than ours. How many Russian rubles can you buy with $300.00 if 20 rubles are worth a dollar?

1. What does the problem ask you to find?
- a. how many rubles is $300
- b. how many dollars are 20 rubles
- c. how much less are rubles worth than dollars
- d. how many rubles can you buy with $300



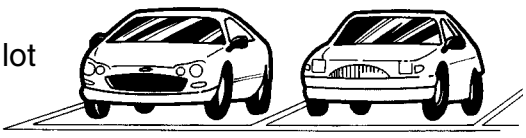
2. What is the extra information in the problem?
- e. Russian rubles are interesting coins
- f. 20 rubles are worth a dollar
- g. rubles are sometimes smaller than our coins
- h. e and g

3. How can you show the problem with numbers?
- i. $300 x 20 rubles/$1 =
- j. $300 x $1 x 20 rubles =
- k. $300 x $\frac{20}{100}$ =
- l. $\frac{20}{300}$ x $1.00 =

4. What is your answer?
- m. 6,000 rubles
- n. 600 rubles
- o. 3,000 rubles
- p. 60,000 rubles

The train-station parking lot has space for 1,000 cars. $\frac{2}{5}$ of the spaces are for standardized cars. Many commuters arrived late for the train. On Tuesday, there were 200 standardized cars and some standard-size cars in the parking lot. The parking lot was $\frac{3}{4}$ full. How many standard-size cars were in the parking lot?

5. What does the problem ask you to find?
- a. how many spaces are for standard-size cars
- b. how many spaces were empty
- c. how many standard-size cars were in the parking lot
- d. how many compact cars could still squeeze in



6. What is the extra information in the problem?
- e. the train station parking lot has space for 1,000 cars
- f. $\frac{2}{5}$ of the spaces are for standardized cars
- g. many commuters arrived late for the train
- h. the parking lot was $\frac{3}{4}$ full

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7. How can you show the problem with numbers? _____

Hint: Keep in mind that the lot holds 1,000 cars, and it was $\frac{3}{4}$ full. How many total cars were there?

8. What is your answer?

i. 750 cars
j. 550 standard-size cars
k. 600 standard-size cars
l. 1,750 cars

Julio runs $\frac{3}{10}$ mile in $1\frac{1}{2}$ minutes. If he keeps running at that rate on a day when the wind is blowing against him, how long will it take him to run one mile?

9. What does the problem ask you to find?

a. how much will the wind slow him down
b. how far does he have to run
c. how fast can he run
d. how long will it take him to run one mile

10. What is the extra information in the problem?

e. he runs $\frac{3}{10}$ mile in $1\frac{1}{2}$ minutes
f. the wind is blowing against him
g. he will keep running at that rate
h. he is going to run one mile

11. How can you show the problem with numbers? _____

Hint: There is a formula for figuring out problems like this one. First, figure out Julio's rate per $1\frac{1}{2}$ minutes: ($\frac{3}{10}$ mile) ÷ ($1\frac{1}{2}$ minutes) = rate per $1\frac{1}{2}$ minutes. (Remember to use the reciprocal for the second fraction and multiply). Once you get his rate, use this formula:

$$t \text{ (time)} = d \text{ (distance)} \div r \text{ (rate)}$$

12. What is your answer?

i. 10 minutes
j. 5 minutes
k. .05 minutes
l. 1 minute

A computer disk holds 720k of memory. The disks come 10 in a pack for $3.95. If three programs are on a disk and they use 27k, 34k, and 52k of memory, how much memory is left on the disk?

13. What does the problem ask you to find?

a. how much does each disk cost
b. how much memory is left on the disk
c. what is the total space being used on the disk
d. how much space is available on a disk

14. What is the extra information in the problem?

e. A computer disk can hold 720k of information.
f. Three programs are on a disk.
g. The three programs use 27k, 34k, and 52k of memory.
h. The disks come 10 in a pack for $3.95.

15. How can you show the problem with numbers?

i. 27k + 34k + 52k = 113k; then 720k – 113k =

j. $3.95 ÷ 10 = $.395 x 113k

k. 113k x 3 =

l. 3(27k + 34k + 52k) =

16. And what is your answer?

m. 607k

n. 339k

o. 2,010k

p. none of these

The Chang Toy Factory in China can produce 35 miniature toy cars each minute at a cost of 77 cents. Then, a package of 35 is put in a cardboard box that holds 350. What does it cost to produce 385 toy cars?

17. What does the problem ask you to find?

a. how much does a box of 385 cars sell for

b. what does it cost to produce 385 toy cars

c. what is the cost of each toy car

d. how much does a box of 350 cars cost

18. What is the extra information in the problem?

e. a package of 35 is put in a cardboard box that holds 350

f. 35 toy cars are produced each minute

g. at a cost of 77 cents

h. what does it cost to produce 385 toy cars

19. How can you show the problem with numbers?

i. $.77 ÷ 35 = $0.022; then 385 cars x $0.022 =

j. $.77 x 35 = $26.95; then $26.95 x 385 =

k. $.77 x 35 = $26.95; then $26.95 ÷ 385 =

l. 385 ÷ 35 =

20. What is your answer?

m. $10,375.75

n. $.07

o. $8.47

p. $.11