

Math Tuition

Home-Based Tuition

Math Tuition

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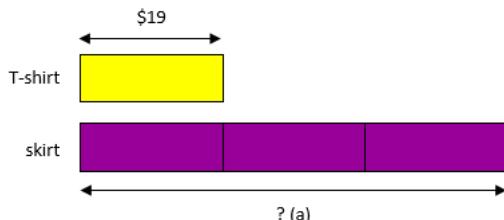
MULTI-STEP WORD PROBLEMS USING MODEL METHOD

PRACTICE UNLIMITED QUESTIONS

I. A T-shirt costs \$19 and a skirt costs 3 times as much.

If Annie is left with \$24 after paying for the T-shirt and the skirt, how much money had she at first?

Grade 5 Math: Whole Numbers, Word Problem Q1



$$4 \times \$19 = \$76 \quad \dots \dots (a)$$

The T-shirt and skirt cost \$76 altogether.



Free IQ Test



Free Intelligence
Quotient Test



Free Intelligence
Test

BlossomUp

$$\$76 + \$24 = \$100$$

Annie had **\\$100** at first.

PRACTICE UNLIMITED QUESTIONS

2. Ben had \$15. After paying for 3 cards and some  stamps, he had \$3 left.

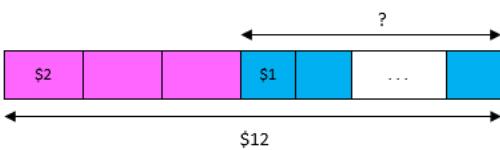
If each card cost \$2 and each  stamp cost \$1, find the number of stamps he bought.

Grade 5 Math: Whole Numbers, Word Problem Q2



$$\$15 - \$3 = \$12 \quad \dots\dots(a)$$

He spent \$12 on the cards and stamps altogether.



$$3 \times \$2 = \$6$$

The cards cost \$6.

$$\$12 - \$6 = \$6$$

The stamps cost \$6.

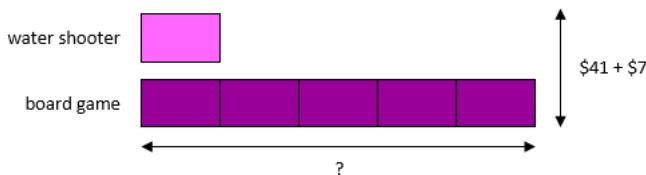
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3. Charlie bought a board game at \$7 off. He also bought a water shooter and paid \$41 altogether.
What was the original price of the board game, if, before discount, it cost 5 times as much as the water shooter?

Grade 5 Math: Whole Numbers, Word Problem Q3



Before discount:



$$$41 + \$7 = \$48$$

The original price of the board game and water shooter was \$48.

$$6 \text{ units} \rightarrow \$48$$

$$1 \text{ unit} \rightarrow \$48 \div 6 = \$8$$

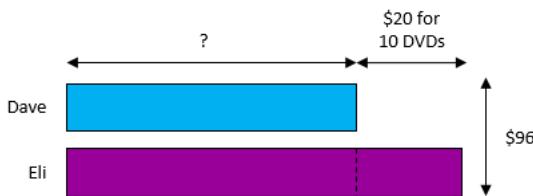
$$5 \text{ units} \rightarrow 5 \times \$8 = \$40$$

The original price of the board game was **\$40**.

PRACTICE UNLIMITED QUESTIONS

4. Dave and Eli bought some DVDs and paid \$96 altogether.
If Eli bought 10 more DVDs than Dave and paid \$20 more than him, find the number of DVDs that Dave bought.

^



$$\$20 \div 10 = \$2$$

Cost of each DVD is \$2.

$$\$96 - \$20 = \$76$$

2 units \rightarrow \$76

$$1 \text{ unit } \rightarrow \$76 \div 2 = \$38$$

Dave spent \$38 on the DVDs.

$$\$38 \div \$2 = 19$$

Dave bought **19** DVDs.



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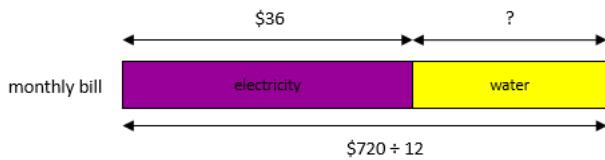
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PRACTICE UNLIMITED QUESTIONS

5. Each month Li pays bills for electricity and water.

If she pays \$36 a month for electricity, and \$720 a year for electricity and water together, find the amount of money she pays for water each month.



$$\$720 \div 12 = \$60$$

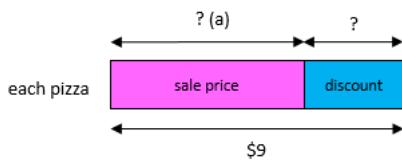
She pays \$60 a month for electricity and water.

$$\$60 - \$36 = \$24$$

She pays **\$24** for water each month.

PRACTICE UNLIMITED QUESTIONS

6. A supermarket is having a promotion on frozen pizzas that are normally priced at \$9 each.
If Ken buys 2 frozen pizzas and gets 1 free, how much does he save on each frozen pizza in this promotion?



In the promotion, Ken pays the usual price for 2 pizzas and gets the 3rd pizza for free.

$$\$9 \times 2 = \$18$$

Ken pays \$18 for 3 pizzas.

$$\$18 \div 3 = \$6 \quad \dots\dots(a)$$

In the promotion, each pizza is \$6.

$$\$9 - \$6 = \$3$$

He saves **\$3** on each pizza in the promotion.

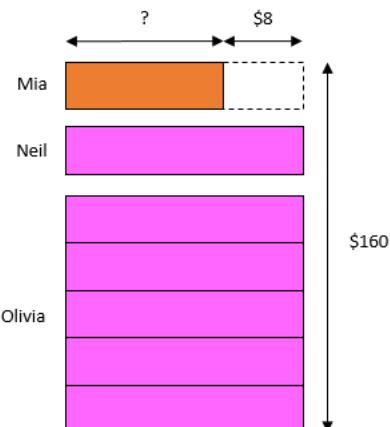
PRACTICE UNLIMITED QUESTIONS

7. Mia, Neil and Olivia had a total of \$160.

Neil had \$8 more than Mia. Olivia had 5 times as much money as Neil.

How much money had Mia?





$$\$160 + \$8 = \$168$$

7 units $\rightarrow \$168$

$$1 \text{ unit } \rightarrow \$168 \div 7 = \$24$$

Neil had \$24.

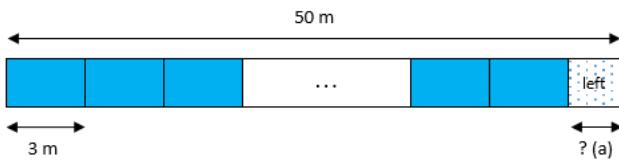
$$\$24 - \$8 = \$16$$

Mia had **\$16**.

PRACTICE UNLIMITED QUESTIONS

8. Piper had 50 m of lace that she divided into pieces of 3 m each.
She sold each 3-m piece for \$5 and the leftover at a discount. She collected \$82 altogether.
How much did she sell the leftover lace for?





$$50 \div 3 = 16 \text{ R } 2 \quad \dots \text{(a)}$$

She got 16 3-m pieces.

There was a leftover piece of 2 m.

$$16 \times \$5 = \$80$$

She sold the 3-m pieces for \$80 altogether.

$$\$82 - \$80 = \$2$$

She sold the leftover piece for **\$2**.

PRACTICE UNLIMITED QUESTIONS

9. Qi had 2 times as many crayons as Maria.

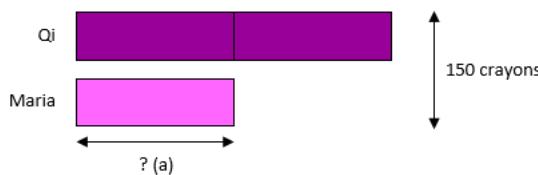
After borrowing some crayons from Maria, Qi now has 5 times as many crayons as Maria.

If they have 150 crayons altogether, how many crayons did Qi borrow from Maria?





Before:

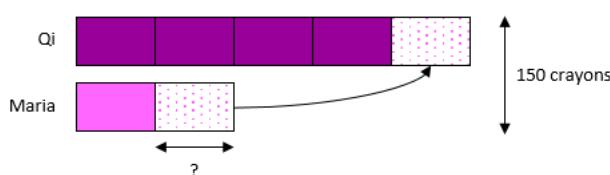


3 units \rightarrow 150 crayons

1 unit \rightarrow $150 \div 3 = 50$ crayons

Maria had 50 crayons at first.(a)

After:



6 units \rightarrow 150 crayons

1 unit \rightarrow $150 \div 6 = 25$ crayons

Maria had 25 crayons left.

$50 - 25 = 25$

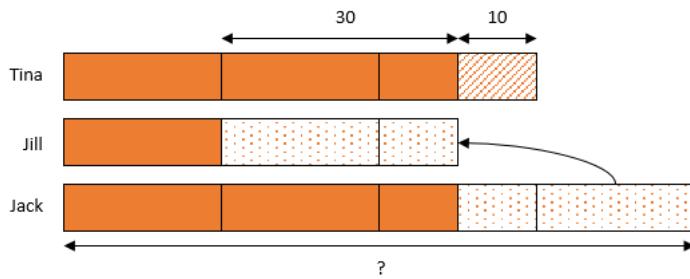
Qi borrowed **25** crayons from Maria.

PRACTICE UNLIMITED QUESTIONS

10. Tina had 3 times as many stickers as Jill while Jack had 4 times as many stickers as Jill.

After Tina gave 10 stickers away and Jack gave 30 stickers to Jill, they each had the same number of stickers.
How many stickers had Jack at first?





2 units $\rightarrow 30 + 10 = 40$ stickers

1 unit $\rightarrow 40 \div 2 = 20$ stickers

4 units $\rightarrow 20 \times 4 = 80$ stickers

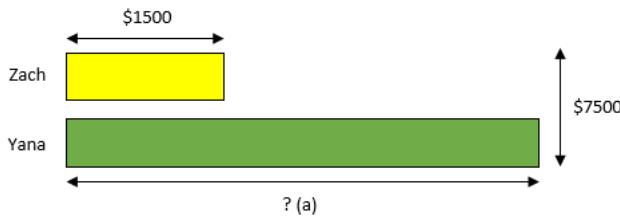
Jack had **80** stickers at first.

PRACTICE UNLIMITED QUESTIONS

II. Yana and Zach have an income of \$7500 together.

If Zach has an income of \$1500, how many times as much income as Zach does Yana have?





$$\$7500 - \$1500 = \$6000$$

Yana has an income of \$6000.(a)

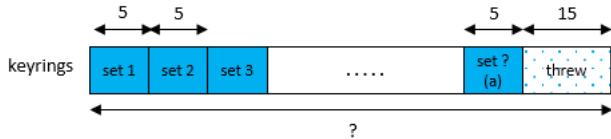
$$\$6000 \div \$1500 = 4$$

Yana has **4 times** as much income as Zach.

PRACTICE UNLIMITED QUESTIONS

12. A shopkeeper bought some key rings from a supplier.
He threw away 15 broken key rings and sold the rest at 5 for \$7.
If he received \$427, how many key rings had he bought from the supplier?





$$\$427 \div \$7 = 61$$

He sold 61 sets of 5 key rings.

$$61 \times 5 = 305$$

He sold 305 key rings.

$$605 + 15 = 620$$

He had bought 620 key rings from the supplier.

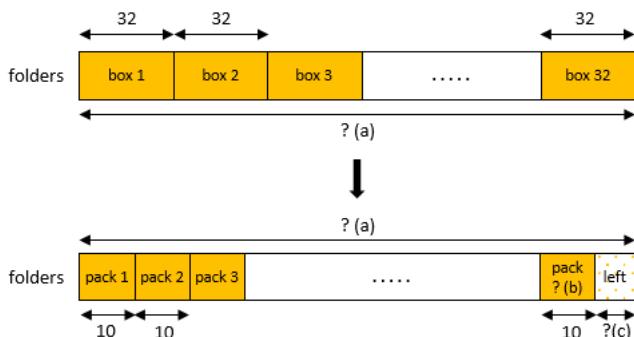
PRACTICE UNLIMITED QUESTIONS

13. A box contains 96 folders.

A bookstore keeper bought 32 boxes of folders and divided the folders into packs of 10.

If he sold each pack for \$7 and the remaining folders for \$1 each, find the sum of money that the bookstore keeper got.





$$32 \times 96 = 3072$$

He bought 3072 folders altogether.

$$3072 \div 10 = 307 \text{ R } 2$$

There were 307 packs of 10 folders each.

There was a remainder of 2 folders.

$$307 \times \$7 = \$2149$$

He sold the 307 packs for \$2149 altogether.

$$2 \times \$1 = \$2$$

He sold the remaining 2 folders for \$2 altogether.

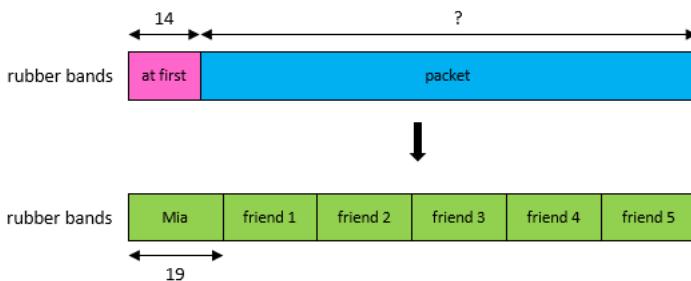
$$\$2149 + \$2 = \$2151$$

He got **\$2151** altogether.

PRACTICE UNLIMITED QUESTIONS

14. Mei had 14 rubber bands before she found a packet containing some rubber bands..
 She and her 5 friends then shared the rubber bands equally among themselves.
 If Mei has 19 rubber bands now, how many rubber bands did the packet have?





Total number of friends including Mei is 6.

$$19 \times 6 = 114$$

Total number of rubber bands is 114.

$$114 - 14 = 100$$

The packet had **100** rubber bands.

PRACTICE UNLIMITED QUESTIONS

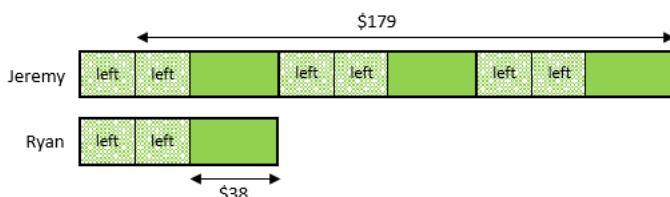
15. Jeremy had 3 times as much money as Ryan.

After Jeremy bought a camera for \$179 and Ryan bought a jersey for \$38, Ryan had 2 times as much money as Jeremy. How much money had Jeremy at first?





redraw the model



$$5 \text{ units} \rightarrow \$179 - (3 \times \$38) = \$65$$

$$1 \text{ unit} \rightarrow \$65 \div 5 = \$13$$

$$\$179 + \$13 = \$192$$

Jeremy had **\$192** at first.

PRACTICE UNLIMITED QUESTIONS

16. 130 children and 110 adults took a Ferris wheel ride.

If a child ticket cost \$9 and an adult ticket cost \$16, how much money was collected by the Ferris wheel operator?





$$130 \times \$9 = \$1170$$

Sum of money collected from child tickets is \$1170.

$$110 \times \$16 = \$1760$$

Sum of money collected from adult tickets is \$1760.

$$\$1170 + \$1760 = \$2930$$

Total sum of money collected by the Ferris wheel operator is **\\$2930**.

PRACTICE UNLIMITED QUESTIONS

I7. A mom is 3 times as old as her son.

10 years later, the mom will be 2 times as old as the son.

How old is the son now?





METHOD 1: Guess and Check

GUESS		CHECK			
Son's present age	Mom's present age (3 times son's age)	Son's age 10 years later (present age + 10)	Mom's age 10 years later (present age + 10)	Is the age of the son twice the age of the mom?	Is it a correct guess?
9 years	27 years	19 years	37 years	$19 \times 2 = 38$	No
11 years	33 years	21 years	43 years	$21 \times 2 = 42$	No
10 years	30 years	20 years	40 years	$20 \times 2 = 40$	Yes

The son is **10 years** old now.

METHOD 2: Model

Watch the video above to understand the steps.

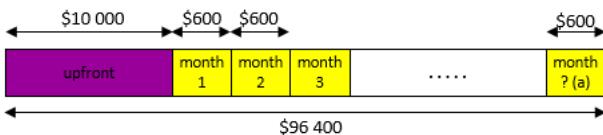
1 unit \rightarrow 10 years

The son is **10 years** old now.

PRACTICE UNLIMITED QUESTIONS

18. Joe paid \$10 000 upfront for a truck priced at \$96 400.
 He will pay the remaining sum of money by monthly instalments of \$600 each.
 How many years will it take Joe to pay off all the instalments?





$$\$96\,400 - \$10\,000 = \$86\,400$$

The remaining sum of money to be paid is \$86 400.

$$\$86\,400 \div \$600 = 144$$

It will take him 144 months to pay off all the instalments.(a)

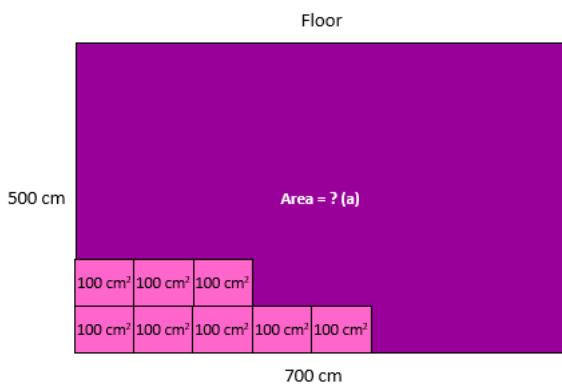
$$144 \div 12 = 12$$

It will take him **12 years** to pay off all the instalments.

PRACTICE UNLIMITED QUESTIONS

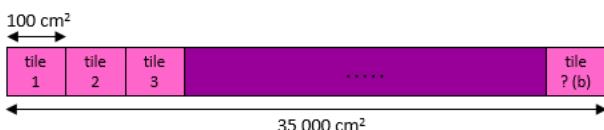
19. A floor measuring 700 cm by 500 cm is being tiled using 100-cm² tiles.
If each 100-cm² tile costs \$2, how much will it cost to tile the floor?





$$700 \times 500 = 350\,000$$

Total area to be tiled is $350\,000 \text{ cm}^2$(a)



$$350\,000 \div 100 = 3500$$

Number of 100-cm² tiles needed is 3500.(b)

$$3500 \times \$2 = \$7000$$

Cost of tiling the floor is **\\$7000**.

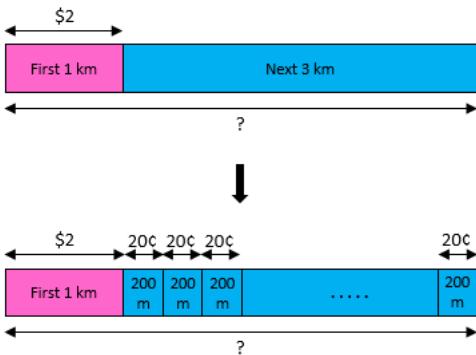
PRACTICE UNLIMITED QUESTIONS

20. Following are the rates that a cab charges.



How much do you pay for a 4-km ride?

Primary 5 / Grade 5 Math: Whole Numbers, Word Problem Q20



Fare for the first 1 km = \$2

$$4 \text{ km} - 1 \text{ km} = 3 \text{ km or } 3000 \text{ m}$$

Remaining distance is 3 km or 3000 m.

$$3000 \text{ m} \div 200 \text{ m} = 15$$

There are 15 sets of 200 m in 3000 m.

$$15 \times 20 \text{¢} = 300 \text{¢} \text{ or } \$3$$

Fare for the remaining distance is \$3.

$$\$2 + \$3 = \$5$$

You pay **\$5** for a 4-km ride.

PRACTICE UNLIMITED QUESTIONS





1 min \rightarrow 25 words

2 min $\rightarrow 2 \times 25 = 50$ words

18 min $\rightarrow 18 \times 25 = 450$ words

The essay had **450** words.

PRACTICE UNLIMITED QUESTIONS

22. The table below shows the number of travelers that arrived at an airport last week.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
No. of travelers	998	498	749	1500	?	?	?	16 240

There were twice as many travelers on Saturday as on Sunday and twice as many on Friday as on Saturday.
How many travelers arrived on Friday?



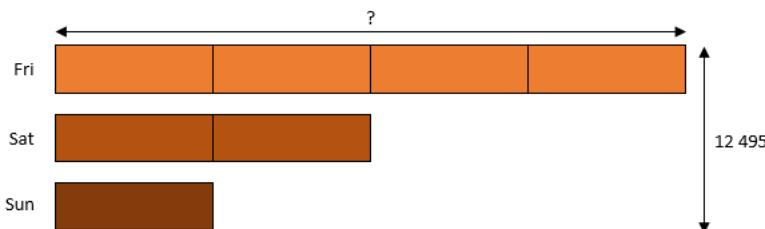


$$998 + 498 + 749 + 1500 = 3745$$

There were 3745 travelers from altogether Monday to Thursday.

$$16240 - 3745 = 12495$$

There were 12495 travelers altogether from Friday to Sunday.



$$7 \text{ units} \rightarrow 12495$$

$$1 \text{ unit} \rightarrow 12495 \div 7 = 1785$$

$$4 \text{ units} \rightarrow 4 \times 1785 = 7140$$

There were **7140** travelers on Friday.

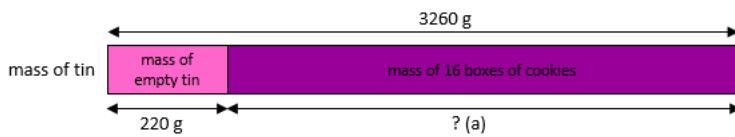
PRACTICE UNLIMITED QUESTIONS

23. The total mass of a tin containing 16 boxes of cookies is 3260 g.

The mass of the tin is 220 g.

If each empty box has a mass of 10 g, what is the mass of cookies inside each box?



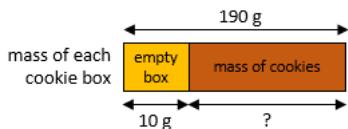


$$3260 - 220 = 3040$$

The mass of the 16 boxes of cookies is 3040 g.(a)

$$3040 \div 16 = 190$$

The mass of each box of cookies is 190 g.



$$190 - 10 = 180$$

The mass of cookies inside each box is **180 g**.

PRACTICE UNLIMITED QUESTIONS

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