PRETESTS

GREEN BOOK PRETESTS

Readiness Check

Solve each problem.

a

b

c

d

1.

Readiness Check (continued)

Write each answer in simplest form.

 $\frac{4}{7} \times \frac{7}{10}$ 7.

b

$$\frac{5}{18} \times \frac{3}{10}$$

c

$$\frac{4}{15} \times \frac{5}{6}$$

d

$$3 \times \frac{2}{7}$$

 $\frac{2}{3} \times 9$ 8.

 $\frac{11}{18} \times 54$

 $1\frac{2}{3} \times \frac{1}{6}$

$$\frac{4}{5} \times 2\frac{2}{3}$$

 $5\frac{1}{2}\times4$ 9.

 $12\times6\frac{3}{4}$

 $1\frac{5}{6}\times5\frac{1}{2}$

$$2\frac{1}{2} \times 1\frac{1}{10}$$

10.

$$\frac{2}{9} + \frac{5}{9}$$

$$\frac{1}{3} + \frac{2}{9}$$

$$+\frac{1}{6}$$

 $\frac{5}{12}$

$$+\frac{1}{4}$$

11.

$$6 + \frac{7}{12}$$

$$+2\frac{1}{3}$$

$$+4\frac{1}{5}$$

$$+5\frac{1}{2}$$

12.

$$\frac{2}{3}$$
 $\frac{1}{5}$

$$\frac{3}{8}$$
 $\frac{1}{3}$

4

$$-\frac{1}{8}$$

$$-\frac{8}{4}$$

13.

$$8\frac{3}{6}$$
 $-2\frac{3}{10}$

$$-2\frac{1}{9}$$

$$-2\frac{5}{8}$$

$$-6\frac{7}{10}$$

Addition Facts (Pretest 1)

$$0 + 1$$

Addition Facts (Pretest 2)

a

c

е

6

g

$$1 \\ +1$$

Subtraction Facts (Pretest 1)

5. 1 4
$$-7$$

Subtraction Facts (Pretest 2)

a

c

e

g

1 5 -6

Multiplication Facts (Pretest 1)

a

$$\begin{array}{c} 1 \\ \times 1 \end{array}$$

5

3

 $\times 6$

Multiplication Facts (Pretest 2)

- a6 1. $\times 2$
- b2 $\times 2$
- c4

 $\times 5$

- d7 $\times 8$
- e5

 $\times 7$

- f8 $\times 8$
- g 3

 $\times 2$

h2 $\times 0$

- 2. 9 $\times 2$
- 5 $\times 6$
- 3 $\times 3$
- 6 $\times 3$
- 1 $\times 9$
- 4 $\times 4$
- 7 $\times 7$
- 1 $\times 4$

- 3. 4 $\times 6$
- 8 $\times 9$
- 0 $\times 9$
- 2 $\times 3$
- 7 $\times 6$
- 3 $\times 1$
- 5 $\times 8$
- 9 $\times 6$

- 4. 1 $\times 0$
- 3 $\times 4$
- 7 $\times 5$
- 6 $\times 4$
- 5 $\times 5$
- 8 $\times 7$
- 6 $\times 5$
- 4 $\times 3$

- 7 5. $\times 9$
- 4 $\times 7$
- 2 $\times 9$
- 1 $\times 2$
- 9 $\times 5$
- 2 $\times 4$
- 7 $\times 4$
- 6 $\times 0$

- 6. 3 $\times 5$
- 8 $\times 6$
- 4 $\times 8$
- 7 $\times 3$
- 5 $\times 4$
- 4 $\times 2$
- 0 $\times 7$
- 9 $\times 7$

- 7. 7 $\times 2$
- 1 $\times 6$
- 9 $\times 4$
- 3 $\times 6$
- 8 $\times 0$
- 4 $\times 9$
- 8 $\times 5$
- 2 $\times 5$

- 2 8. $8 \times$
- 5 $\times 3$
- 5 $\times 9$
- 4 $\times 0$
- 9 $\times 8$
- 2 $\times 6$
- 3 $\times 7$
- 1 $\times 8$

- 6 9. 8×
- 8 $\times 2$

9

- 6 $\times 7$
- 9 $\times 9$
- 3 $8\times$
- 8 $\times 4$
- 6 $\times 6$
- 5 $\times 1$

- 10. 3 $\times 9$
- $\times 3$
- 0 $\times 5$
- 2 $\times 7$
- 5 $\times 2$
- 7 $\times 1$
- 8 $\times 3$
- 6 $\times 9$

Division Facts (Pretest 1)

a

b

c

d

e

f

g

Division Facts (Pretest 2)

 α

b

c

d

e

f

g

Mixed Facts Pretest

Add, subtract, multiply, or divide. Watch the signs.

5 9 +6 7

a

b

c

d

2.

1.

3.

$$\begin{array}{c} 4 \ 2 \ 0 \\ -2 \ 3 \ 7 \end{array}$$

4.

5.

6.

Mixed Facts Pretest (continued)

Add, subtract, multiply, or divide. Watch the signs.

 \boldsymbol{a}

7. 2765 4283 +1065 b

 \boldsymbol{c}

d

8.

$$91000$$
 -27624

9.

$$812600$$
 -74607

PROBLEM-SOLVING

PROBLEM-SOLVING STRATEGIES

Multi-Step

Kevin went to the butcher shop and bought 3 kg of roast beef, 4 kg of turkey, and 1 kg of ham. The roast beef cost \$8.79 per kilogram, the turkey cost \$6.75 per kilogram, and the ham cost \$6.50 per kilogram. How much money did Kevin spend at the butcher shop?

The total cost of the roast beef was $\frac{$26.37}{}$.

The total cost of the turkey was \$27.00.

The total cost of the ham was \$6.50.

Kevin spent \$59.87 at the butcher shop.

Find the total cost of the roast beef, the turkey, and the ham.

Next find the sum of the three individual costs.

\$26.37 27.00 +6.50 \$59.87

Solve each problem.

SHOW YOUR WORK

1. Quiana bought a pair of shorts for \$24.87 and a bottle of perfume for \$18.35. The tax on the purchase was \$2.59. She paid with a \$50 bill. How much change did Quiana get back?

Quiana got back _____ in change.

2. Betsy read 174 pages last week. She read on Monday, Wednesday, Saturday, and Sunday. On Monday, she read 35 pages. On Wednesday, she read 47 pages. On Saturday, she read 53 pages. How many pages did Betsy read on Sunday?

Betsy read _____ pages on Sunday.

3. On Friday at the Burger Bistro, 349 hamburgers were sold. On Saturday, twice as many hamburgers were sold than on Friday. On Sunday, 38 fewer hamburgers were sold than on Saturday. How many hamburgers were sold at the Burger Bistro on Sunday?

hamburgers were sold on Saturday.

_____ hamburgers were sold on Sunday.

Draw a Picture

The Beltsos family has an above-ground rectangular swimming pool in the backyard. The swimming pool is 7 m by 3 m. There is a 2-m wide deck that completely surrounds the swimming pool. Mr. Beltsos is going to paint the deck to keep the wood from fading. How many square metres will Mr. Beltsos paint?

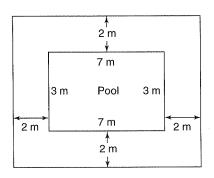
Mr. Beltsos will paint ___56__ m².

Find the area of the pool and deck.

$$2 + 3 + 2 = 7$$

 $2 + 7 + 2 = 11$
 $11 \times 7 = 77$

Draw a diagram of the pool and deck.



Find the area of pool: $7 \times 3 = 21$ Subtract the area of the pool. area of deck: 77 - 21 = 56The area of the deck is 56 m^2 .

Solve each problem.

SHOW YOUR WORK

1. Karen wants to put ribbon around a birthday gift she wrapped. The package is 12 cm long, 11 cm wide, and 4 cm tall. She needs one ribbon that is long enough to wrap around the package's length and height. She needs another ribbon that is long enough to wrap around the package's width and height. How much ribbon does she need in all?

Karen needs _____ cm of ribbon.

2. Mrs. Habell is retiring from teaching at the end of the school year. Each year for the past 28 years, she has had each student bring her a piece of material that was either an 80 cm by 80 cm square or an equilateral triangle with sides measuring 80 cm. She will use one square piece and four triangular pieces to create a star pattern for a quilt. What is the perimeter of each star pattern for the quilt?

The perimeter of each star pattern is cm.

Look for a Pattern

Thomas and his friends are sharing a large pizza. Thomas makes the first diameter cut and separates the pizza into two pieces. The second diameter cut he makes creates four pieces. How many pieces of pizza will there be if Thomas makes six diameter cuts?

There will be ___6__ pieces of pizza with three diameter cuts.

There will be ______ pieces of pizza with six diameter cuts.

Look for a pattern as the number of diameter cuts increases.

Diameter cut	1	2	3	4	5	6
Pieces	2	4	6	8	10	12

With each consecutive cut, there are two more pieces.

Solve each problem.

SHOW YOUR WORK

1. The required ticket total at a video arcade more than doubles as the prizes get better. The first level of prizes requires 25 tickets. The second level of prizes requires 60 tickets. The third level of prizes requires 130 tickets. If this pattern continues, how many tickets will be required for the fourth level of prizes?

The fourth level of prizes will require _____ tickets.

2. On the first day that Janine did everything on her chore list, her father put a nickel in a money jar. He told her that for each day she did all of her chores he would double the amount in the jar. When she had earned enough for her favourite type of pizza, he would take her out to eat. How many days in a row does Janine have to do all of her chores to earn \$12.00 for the pizza?

If Janine does all of her chores for _____ days in a row, she will earn enough money for the pizza.

Guess and Check

Li Mei is renovating her bedroom. She is getting new carpet, painting the walls, and putting up a wallpaper border. She needs 18 m² of carpet and 18 m of wallpaper border. What are the dimensions of Li Mei's bedroom?

The amount of carpet represents the <u>area</u> of the bedroom.

The amount of wallpaper border represents the perimeter of the bedroom.

The dimensions of Li Mei's bedroom are 3 m/6 m $\,$

Guess possible dimensions of the room. Check to see if the area is 18 m^2 and the perimeter is 18 m.

Guess: 9 m by 2 m $area: 9 \times 2 = 18$

Correct.

perimeter: 9 + 9 + 2 + 2 = 22Incorrect.

Guess: 6 m by 3 m $area: 6 \times 3 = 18$

Correct.

perimeter: 6 + 6 + 3 + 3 = 18 Correct.

Solve each problem.

SHOW YOUR WORK

1. In the basketball game, Justin, A.J., and Verdell scored the most points of all the players on the team. Justin and A.J.'s combined points were 10 less than twice Verdell's points. Justin scored 2 more points than A.J. Verdell scored 18 points. How many points did Justin score? How many points did A.J. score?

Justin scored _____ points.

A.J. scored _____ points.

2. Alita jogged on Wednesday, Friday, and Sunday. She jogged twice as far on Sunday as she did on Wednesday. The combined number of kilometres she jogged on Wednesday and Sunday is four times the distance she ran on Friday. Alita jogged 3 km on Friday. How many kilometres did Alita jog on Wednesday? How many kilometres did Alita jog on Sunday?

Alita jogged _____ km on Wednesday.

Alita jogged _____ km on Sunday.

16

Identify Missing Information

Phillip is the centre for a high school hockey team. The first three hockey games of the season Phillip averaged 17 min on the ice. If Phillip's average remains at about 17 min per game for the whole season, about how many total minutes will he have been on the ice for the season?

Missing information: number of games in the season

Multiply to find the approximate total number of minutes Phillip spent on the ice for the season.

17 min

× number of games in season

total time on ice for season

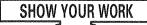
Not enough information.

Information on the number of games in the season is missing.

Solve each problem.

1. Mr. Chun earns \$17.75 an hour. He has \$156.20 taken out of his paycheque for federal income taxes and \$42.60 for provincial and local taxes. He also has \$100.00 taken from his pay and deposited in a savings account. What is Mr. Chun's take-home pay?

Missing information:



2. Dean bowled with friends on Saturday night. All of his games totalled 615 points. What was Dean's average score per game?

Missing information:

3. Each level in a parking garage has spaces for 230 cars. The minimum amount charged per car is \$2.50. What is the least amount of money the cashiers will collect if all the levels are full?

Missing information:

Make a Table

Kenny and David have a lawn mowing business. They charge an initial fee of \$6.00 per lawn, and \$4.00 for every 30 min it takes to mow the lawn. It takes Kenny and David $2\frac{1}{2}$ h to mow Mr. Gooderson's lawn. How much do they charge Mr. Gooderson?

It costs \$14.00 for the first hour.

It costs Mr. Gooderson \$26.00 to have Kenny and David mow his lawn.

Make a table to determine the cost of Kenny and David's lawn service for every 30 min up to $2\frac{1}{2}$ h.

Hours	Cost
1/2	\$10.00
1	\$14.00
1 1 2	\$18.00
2	\$22.00
2 <u>1</u>	\$26.00

Solve each problem.

SHOW YOUR WORK

1. When Andrea reads a book, her grandpa pays her a quarter for each chapter in that book. Last month she read *The Yellow Tulip* with 7 chapters, *The Man and His Monkey* with 12 chapters, and *Red*, *Blue*, *Green* with 10 chapters. How much did Andrea's grandpa pay her for the books she read last month?

Andrea's grandpa paid her _____.

2. A taxi charges \$2.50 plus 25¢ for each half kilometre travelled. How much is the fare for a 3-km trip?

The fare is ______ for a 3-km trip.

3. The city streetcar follows the same route all day. Each time through, the route takes 1 h 15 min. The first stop is at the corner of Vine Street and 25th Avenue at 8:55 A.M. What time does the streetcar make its 5th stop at Vine Street and 25th Avenue?

The streetcar makes its 5th stop at _____.

Make a List

On Saturday, Danisha and her friends are deciding between swimming, biking, painting, and hiking. They are going to do two of four activities. How many different combinations of activities can Danisha and her friends choose?

Danisha and her friends can choose from ___6__ different combinations of activites.

Make a list of all the possible combinations.

swimming biking
swimming painting
swimming hiking
biking painting
biking hiking
painting hiking

Count the combinations.

Solve each problem.

SHOW YOUR WORK

1. The chess club is choosing a president, vice president, and secretary for the school year. Rhonda, Jade, and Kim have all agreed to serve. How many different ways can the three of them serve as officers?

There are _____ different ways that Rhonda, Jade, and Kim can serve as officers.

2. When the Best Bump rental car company assigns cars to customers, they rotate in alphabetical order among five different types of cars. The types of cars in their lot are trucks, vans, SUVs, compact, and mid-size. What model is rented to the 14th customer in the same day?

The 14th type of car rented is a ______.

3. Every other day James runs 3.5 km. On the other days he swims laps. If James ran on Sunday, how many kilometres will he run before he runs on Sunday again?

James will run _____ km.

Solve a Simpler Problem

Mrs. Friegle owns a small business. At the end of the year her company had a surplus of \$48 000. She wants to divide this money evenly among her employees and give them all a bonus. She has 12 employees in her small business. How much money will each employee receive as a bonus at the end of the year?

What operation are you to perform? <u>division</u>

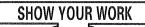
Each employee will receive a \$4000 bonus.

Remove three zeros from 48 000, then divide by 12.

$$\begin{array}{r}
 4 \\
 12)48 \\
 \underline{48} \\
 0
\end{array}$$

Replace the zeros to get \$4000.

Solve each problem.



1. Mr. and Mrs. Carmona are buying a new house. The cost of the house they are buying is \$150 000. They are able to afford $\frac{1}{5}$ of the cost of the house as a down payment. They will then take out a loan for the remaining amount of the house. What will be the amount of Mr. and Mrs. Carmona's loan?

The amount of Mr. and Mrs. Carmona's loan will be _____

In 2001, the population of Ontario was 11 410 046. In 2001, the population of British Columbia was 3 907 738. About how many more people lived in Ontario than British Columbia in 2001?

The population of Ontario in 2001 was _____, to the nearest million.

The population of British Columbia in 2001 was _____, to the nearest million.

In 2001, there were about ____ people living in Ontario than British Columbia.

Work Backward

Roberta has 543 total points in French class. In her folder she has quiz papers with scores of 35, 35, 42, and 26. Her 15 homework grades are all 10 out of 10. She knows that there were three tests, but can only find papers for two. The scores she knows are 88 and 90. What is the score of the test Roberta cannot find?

The score of the test Roberta cannot find is 77

Work backward to find the test score.

$$543 - \overline{35 - 35 - 42 - 26} = 405$$

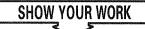
homework scores

$$405 - (10 \times 15) = 255$$

test scores

$$255 - 88 - 90 = 77$$

Solve each problem.



1. Mr. Clarsen went to the grocery store with \$55.00. After he went through the checkout lane, he purchased a box of cookies for \$3.50 from children selling them near the exit door. When he got into his car, he checked the money he had remaining. He had \$13.35. After double-checking his receipt to see that the groceries had cost \$28.15, he realized that the cashier had given him incorrect change. How much money does the cashier still owe Mr. Clarsen?

The cashier owes Mr. Clarsen _____.

2. Davida walks her dog 1.25 km each day along the same triangular route. From home to the corner deli is 0.56 of a km. She then turns the corner and walks 0.34 km to Jim's Camera Shop. She turns right again and walks back home. How far is Davida's house from Jim's Camera Shop?

Davida's house is _____ km from Jim's Camera Shop.

Use Estimation

Jamal has the job of chalking the baseball field for the little league games played in the park. He starts at home plate and walks to first base to make the first line of the infield. This distance is 8.7 m. He walks the same distance to second and third base and back to home plate. About how many feet does Jamal walk to put down the chalk line on the field?

Jamal walks about 36 m to put the chalk line on the field

Round 8.7 m to 9 m. Then multiply 9 m by 4, since there are 4 sides to be chalked.

 $\frac{9}{\times 4}$ $\frac{36}{36}$

Solve each problem.

SHOW YOUR WORK

1. Santiago works at a local fast food restaurant. He earns \$6.12 per hour. Last week Santiago worked 4 h on Monday, 3 h on Tuesday, 4 h on Thursday, and 7 h on Saturday. About how much money did Santiago earn last week?

Santiago worked _____ hours last week.

Santiago earned about _____ last week.

2. Rogers Centre in Toronto has a seating capacity of 53 506 people. Commonwealth Stadium in Edmonton has a seating capacity of 60 081 people. About how many more people does Commonwealth Stadium hold than Rogers Centre?

Commonwealth Stadium holds about _____ more people.

3. Meagan went shopping at the mall. She took \$90.00 with her. She bought a bathing suit for \$32.76, a CD for \$16.89, and a purse for \$21.50. About how much money did Meagan have left after buying these three items?

Meagan had about _____ left.