

## 5<sup>th</sup> Grade TEKS Readiness Focus

TEKS 5.4B *represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.*

### Activity Directions:

Items Needed: *Math Tales* activity, scissors, glue

1. Students must match word problems to given equations including a variable representing the unknown quantity. They must then calculate the solution to each problem. (See below.)
2. Have students practice questions coded to TEKS 5.4B.

Name \_\_\_\_\_

### *Math Tales*

Find the matching word problem and solution for each equation shown below.

<p>The perimeter of a rectangle measures 52 inches. If the length of the rectangle is 16 inches, what is the width of the rectangle, <math>w</math>?</p>	<p>Dan has 6 pencils. Ann has 12 pencils. Jan has 8 pencils. If Dan, Ann, and Jan give half of their pencils to some kindergarten children, how many pencils will be left, <math>p</math>?</p>	<p>Nadani is making bracelets for the school club. She uses a total of 20 beads for each bracelet. If 10 of the beads are purple, six of the beads are white, and the remaining beads, <math>b</math>, are striped. How many beads are striped?</p>	<p>Trey is a truck driver. His odometer read 130,000 miles on Monday morning and 132,875 miles on Friday night. If he drove all 5 days, what is the average amount Trey drove each day, <math>a</math>?</p>
$(2 \times 16) + (2 \times w) = 52$	$(6 + 12 + 8) \div 2 = p$	$5 + 6 + b = 20$	$(132,875 - 130,000) \div 5 = a$
$w = 10$	$p = 13$	$b = 9$	$a = 575$
<p>There are 136 boys attending a summer baseball camp. 44 of the campers are younger than 10. One-half of the remaining campers are older than 15. How many of the boys, <math>b</math>, are older than 15 years of age?</p>	<p>Wyatt was born weighing 8 pounds. He gained an average of 8 pounds a year for 6 years. How much did Wyatt weigh, <math>w</math>, at that point in time?</p>	<p>Lily earned \$200 baby-sitting each month for 6 months. If she deposited \$575 of her earnings into a college savings account, what amount of money does Lily have now, <math>a</math>?</p>	<p>Mr. Banda is a painter. He bought 4 paintbrushes for \$5 each, and 5 gallons of paint, <math>p</math>. If he spent a total of \$95 on the paint and brushes, what is the cost of one gallon of paint?</p>
$\frac{(136 - 44)}{2} = b$	$8 + 6 \times 8 = w$	$(6 \times 200) - 575 = a$	$(4 \times 5) + (5 \times p) = 95$
$b = 46$	$w = 56$	$a = 625$	$p = 15$

Name \_\_\_\_\_

Date \_\_\_\_\_

TEKS 5.4B *represent and solve* multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.

TEKS 5.4B Mini-Assessment

1. Coach Pena is hosting a cookout for 32 football players. He will cook 2 hamburgers for each player. Hamburger buns are sold in packages of 8. Which of the following equations can be used to find  $p$ , the number of packages of hamburger buns needed for the cookout?

- (A)  $(32 \div 2) + 8 = p$
- (B)  $(32 \times 2) \div 8 = p$
- (C)  $(32 \div 2) \times 8 = p$
- (D)  $(32 \times 2) + 8 = p$

2. A technology service company completed repairs on 52 laptops and 38 smart phones last month. If each repair required 2 hours of service time, which equation can be used to find  $h$ , the total number of hours spent repairing the laptops and smart phones?

- (A)  $h = (52 + 38) + 2$
- (B)  $h = (52 + 38) - 2$
- (C)  $h = (52 + 38) \times 2$
- (D)  $h = (52 + 38) \div 2$

3. Ruben has a collection of 118 rare coins.

- He displays 34 of the coins in a shadow box.
- He keeps the remaining coins in 6 storage containers.
- Each storage container holds an equal number of Ruben's coins.

Which equation can be used to find  $n$ , the number of coins in each storage container?

- (A)  $(118 + 34) \times 6 = n$
- (B)  $(118 - 34) \times 6 = n$
- (C)  $(118 + 34) \div 6 = n$
- (D)  $(118 - 34) \div 6 = n$

4. At the museum, adult tickets cost \$8 and youth tickets cost \$5. Which equation can be used to find  $t$ , the total number of dollars a family of 2 adults and 6 youth would pay for museum tickets?

- (A)  $t = (2 \times 8) + (6 \times 5)$
- (B)  $t = (2 \times 5) + (6 \times 8)$
- (C)  $t = (2 \times 6) + (5 \times 8)$
- (D)  $t = (2 \times 8) \times (6 \times 5)$



5. Farmer Fred is building a fence around the perimeter of his garden.

- The perimeter of the garden is 64 feet.
- Each section of the fence is 4 feet long and costs \$12.

Which equation can Farmer Fred use to find  $b$ , the cost of the sections of fence he needs for the garden?

- (A)  $64 \div (12 \div 4) = b$
- (B)  $(12 \times 4) \times 64 = b$
- (C)  $64 \div (12 \times 4) = b$
- (D)  $(64 \div 4) \times 12 = b$

7. Christina and Clarissa have a lemonade stand. On Saturday, they bought 120 lemons to make lemonade. Christina used 15 lemons each hour for 3 hours, and Clarissa used 20 lemons each hour for 2 hours. The equation below can be used to find  $x$ , the number of lemons remaining.

$$x = 120 - (3 \times 15) - (2 \times 20)$$

How many lemons are left?

Enter your answer in the box.



6. A fan club ordered 8 boxes of T-shirts. Each box contained 24 small and 36 large T-shirts. The club used this equation to find  $x$ , the number of T-shirts packed in all the boxes.

$$x = (24 + 36)8$$

How many T-shirts were inside these boxes?

Enter your answer in the box.



8. A game app awards points based on targets hit. Melody played one round and earned the following points.

- She hit 5 targets worth 4 points each.
- She hit 7 targets worth 5 points each.
- She hit 14 targets worth 1 point each.

This equation can be used to find  $p$ , the total number of points Melody earned during the round.

$$p = 5(4) + 7(5) + 14$$

What is the total number of points Melody earned during the round?

Enter your answer in the box.

9. Mr. Xian owns a bike rental business. It is open for 8 hours on Saturday. On Saturday morning, Mr. Xian had 50 bicycles.

- Mr. Xian rented 4 bicycles to customers during each of the first 4 hours.
- Mr. Xian rented 2 bicycles to customers during each of the next 3 hours.
- The total number of bicycles that were brought back to the company by customers on Saturday was 19.

In which equation does  $b$  represent the number of bicycles Mr. Xian had at the end of the day on Saturday?

- Ⓐ  $b = 50 - (4 + 4) - (2 + 3) + 19$
- Ⓑ  $b = 50 - (4 \times 4) - (2 \times 3) + 19$
- Ⓒ  $b = 50 - (4 + 4) - (2 + 3) - 19$
- Ⓓ  $b = 50 - (4 \times 4) - (2 \times 3) - 19$



10. Anthony has a food truck. He earned a total of \$163.75 in the first 30 minutes he was open for business on Monday.

- He sold 20 hamburgers for \$5.75 each.
- He sold 15 hot dogs.
- Each hot dog was the same price.

The equation shown can be used to find  $h$ , the amount of money Anthony earned for each hot dog sold.

$$h = [163.75 - (20 \times 5.75)] \div 15$$

What was the amount of money in dollars and cents Anthony earned for each hot dog sold?

Enter your answer in the box.

