Solve the problems.

1 Which situation can be represented by the equation $-4 \times 5 = -20$?

A Jack exercised for 4 hours after school each day last week.

B The cost of a summer pool pass increased $4 each of the last 5 years.

C Amanda earned $4 for each of 5 classes in which she received an A.

D The temperature dropped 4 degrees each hour for 5 consecutive hours.

2 In which situation do the quantities combine to make 0?

A Emily ran 3 miles on Saturday and walked 3 miles on Sunday.

B Beverly bought a chair for $350 and sold it 3 years later for $350.

C Josh ran 2 laps counterclockwise around a track and then 2 laps clockwise around the track.

D Trey deposited $150 into his savings account on Friday and withdrew $100 the following week.

3 Which expression is equivalent to $19 - 27$?

A $27 - 19$

B $-(19 + 27)$

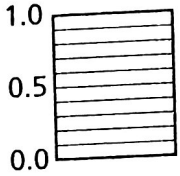
C $19 + (-27)$

D $-19 + 27$

4 Roger makes 70 gallons of pink paint by mixing 21 gallons of red paint with 49 gallons of white paint.

What part of every gallon is from red paint? _____

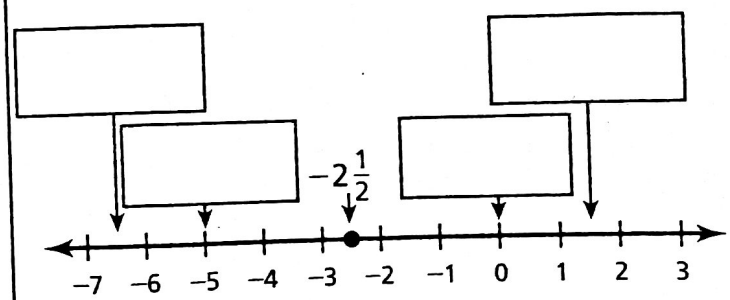
The model represents one gallon of mixed paint.



Shade the correct number of bars to show how much of a gallon is from red paint.

5 The point on the number line shows the location of $-2\frac{1}{2}$. Write each expression in a box to show its correct location on the number line.

$-2\frac{1}{2} + (-4)$	$-2\frac{1}{2} - (-4)$
$-2\frac{1}{2} - 2\frac{1}{2}$	$-2\frac{1}{2} + 2\frac{1}{2}$



6 Fill in the boxes below with numbers that make the statement true.

$\square + (-7.28) =$ a positive number

$12 + \square = 0$

$\square - 2\frac{3}{4} =$ a negative number

$-4.8 - \square =$ a positive number

$-15 + 15 = \square$

7 Nolan correctly spelled $\frac{13}{16}$ of his spelling words. How is $\frac{13}{16}$ written as a decimal?

Show your work.

Answer _____

Solve the problems.

1 Jill always buys the same kind of shampoo in an 11.5-ounce bottle. She is at the store buying more and sees that the bottle is now bigger and has 20% more for the same price. How many ounces of shampoo are in the new bottle?

A 11.5

B 13.8

C 17.3

D 23.0

2 Mark incorrectly solved the inequality $-4\left(\frac{5}{2}+\frac{3}{2}x\right) > 8$. His work is shown.

Part A: Which step shows an error based on the inequality only from the previous step? Select all that apply.

A Step 1: $-10 + 6x > 8$

B Step 2: $6x > 8 - 10$

C Step 3: $6x > -2$

D Step 4: $x > -\frac{1}{3}$

Part B: What is the correct solution to the original inequality? _____

3 Luke's baseball team went to an amusement park at the end of the season. The cost of admission for 5 coaches and 12 players was $407.50. The admission cost for each coach was $27.50. What was the admission cost for each player?

A $22.50

B $23.97

C $27.50

D $31.67

4 Which scenario represents the expression $4x - 4$? Select Yes or No for each scenario.

A Jack earns $4 per hour but owes his parents $4; x represents the number of hours he works.

☐ Yes ☐ No

B Alex is 4 years older than 4 times Ava's age; x represents Ava's age.

☐ Yes ☐ No

C A store has a 4% discount on gloves; Mike bought x pairs of gloves at $4 a pair.

☐ Yes ☐ No

D Jane bought x number of tickets at $4 each and had a coupon for $4 off the total cost.

☐ Yes ☐ No

5 Bobby is hanging a cabinet above the washer and dryer in the laundry room. The cabinet is $3\frac{1}{2}$ feet wide and 2 feet tall. If he wants to center the cabinet horizontally on a wall that is $6\frac{1}{4}$ feet wide, how far will the end of the cabinet be from the edge of the wall?

Show your work.

Answer _____

6 Lauren says the two expressions $3x + 4(2x + 5)$ and $6x + 5x + 5$ are equivalent.

Part A

Simplify the expressions to determine whether or not Lauren is correct.

Show your work.

Answer _____

Part B

Substitute a number for the variable to determine whether or not Lauren is correct.

Show your work.

Answer _____